

ANCOR/SR 32 HILL FOCUS AREA ADVISORY COMMITTEE MEETING NOTES

MEETING #4 NOTES

Meeting Date

Dec. 10, 2018

Meeting Location

Anderson Center

Meeting Objectives

- Review results of the signal timing improvements made along SR 32 and US 50 within the Segments II and III study area and in the Village of Newtown.
- Review feedback received from the public at the Oct. 24 and 25 Open House meetings and during the subsequent public comment period.
- Discuss:
 - Possible refinements to alternatives based on feedback received and determine which, if any, alternatives should be removed from further consideration.
 - Prioritization preferences for remaining alternatives.
 - Possible funding sources.
- Discuss ODOT's Implementation Plan strategy and next steps.

Meeting Summary

Tommy Arnold, ODOT, opened the meeting and shared the following:

- This is the fourth and final Advisory Committee meeting for this
 focus area. Thank you to all who have invested many hours over the
 past year to discuss transportation needs, develop possible
 solutions, review and discuss concept evaluation results, and
 provide input that will be used to help inform the development of
 the Implementation Plan.
- The Implementation Plan will identify the projects ODOT recommends for future development and construction. Projects will be designated as high, medium or low priorities. Possible project sponsors and potential funding options will also be identified in the plan.
- While ODOT may be able to assist with the funding and implementation of some of the projects, it is anticipated that the

- responsibility for many projects will fall under the purview of local jurisdictions. The Implementation Plan will serve as a tool that jurisdictions can use to assist with their planning efforts.
- ODOT and its consultant team will be developing the Implementation Plan during the upcoming weeks and expects to have a draft completed in early 2019.
- It was noted later in the meeting that all projects in the Implementation Plan can be phased in different ways, depending on available funding. It was also noted that, currently, no funding has been identified for projects. ODOT will incorporate its recommendations into the Implementation Plan, designate priorities and discuss funding package preparation with the jurisdictions.

Matt Crim, Stantec, shared Signal Timing Study updates and discussed how traffic flow has been affected since signal timing adjustments were completed in October and November. The information shared is summarized on the Signal Timing Study (STS) pages of these notes.

Steve Shadix, Stantec, distributed a packet of concept comparison matrices for each of the proposed concepts. Copies of each matrix is provided with the discussion notes for each concept on the following pages. He also passed out copies of a draft report that summarized input received on the improvement concepts proposed for this focus area and were presented to the public at the Oct. 24 and 25 Open House meetings. The content of the report was reviewed as part of the meeting's subsequent discussion of concepts. Mr. Shadix also shared the following introductory comments:

- A total of 175 people signed in at the Open Houses. However, because some people opted not to sign in, the total number of attendees was slightly higher.
- 125 people submitted comment forms. Approximately 54% of the comment forms were submitted at the Open House meetings or sent in via email after the meetings had concluded. The remaining 46% were submitted online using a digital version of the comment form (links to the online comment form were provided on the project website, in meeting materials and email notices). All responses received at the Open Houses and via mail or email were entered into the online comment form database to facilitate analysis.
- Approximately 52% of respondents (64 people) said they lived in either the 45227 (Mariemont, Fairfax, Madisonville; 26%) or 45244 (Newtown, Anderson Township, Union Township; 26%) zip codes.
- When asked how they heard about the Open House meetings, emails from Eastern Corridor, Facebook and "Other" were most frequently

reported as sources. Emails from community councils and/or community representatives, friends/relatives, the Nextdoor community-based social network and a local bike shop were most frequently cited as information sources for "Other." Mr. Shadix thanked Advisory Committee members for assisting with getting the word out to their constituents about the public Open Houses.

- The comment form asked respondents to indicate the degree to which they support each proposed concept using a five point scale (strongly support, like, neutral, dislike and strongly oppose). The summary report focuses on the distribution of responses received for each concept.
- Respondents were also invited to share any comments they may have regarding the proposed concepts. Comments received on the forms, as well as any submitted separately via email and mail, were recorded and are included in the summary report.

Discussion notes for each proposed concept in this focus area are documented on the following pages.

MEETING PARTICIPANTS

Nathan Alley, Sierra Club
Caroline Ammerman, Stantec
Tom Arnold, ODOT
Brittnay Bell, Rasor Marketing Communications
Brad Bowers, Anderson Township
Ken Burger, Burger Farms
Matt Crim, Stantec
Todd Gadbury, Hamilton County Engineer's Office
PJ Ginty, Anderson Township
Mark Kobasuk, Village of Newtown
Ken Kushner, Anderson Parks District
Charlie Rowe, ODOT
Steve Shadix, Stantec
Laura Whitman, Rasor Marketing Communications

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Eastern Corridor Segments II and III ANCOR/SR 32 Hill Focus Area

Theme

SR 32 - LITTLE DRY RUN TO EIGHT MILE ROAD

Primary Needs identified for this theme:

- P1) Address capacity issues on SR 32 and Little Dry Run.
- P2) Address rear-end crashes on SR 32 related to left turns onto Hickory Creek Drive.
- P3) Address westbound AM peak-hour delays.
- P4) Address congestion issues due to slow moving trucks and turning vehicles.

Secondary Needs identified for this theme:

- S1) Address deficient sight distance on Little Dry Run approach to SR 32.
- S2) Address roadway grade deficiencies at six locations.

Concept not drawn.

DESCRIPTION

Improve signal timing.

NEEDS ADDRESSED

- P1) Address capacity issues on SR 32 and Little Dry Run.
- P3) Address westbound AM peak-hour delays.

5/16 MEETING DISCUSSION AND COMMENTS

- A draft signal study has been completed for the Segments II and III study area.
- Individual municipalities are currently in the process of completing paperwork to facilitate installation of new traffic signal controllers and GPS clocks. These modifications will be funded by ODOT.
- Work is expected to be completed sometime this fall.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Signal timing improvements are underway throughout the corridor along SR 32, US 50 and at the Church/Valley intersection in Newtown. New controllers were installed the week of Aug. 13.
- Continued evaluation is necessary to tweak improvements. There is more traffic in the area now, likely the result of seasonal fluctuations (back to school), construction on I-275 and the closure of a portion of Wooster Pike.
- Stantec recommends additional upgrades to provide advanced detection and wireless signal interconnects; these details for the entire corridor are included in the concepts outlined for the Village of Newtown Focus Area.
- No additional comments were received following the 9/5 meeting.

12/12 MEETING DISCUSSION AND COMMENTS

Matt Crim, Stantec, shared Signal Timing Study updates and discussed how traffic flow has been affected since signal timing adjustments were completed in October and November:

• Earlier this year, Stantec, ODOT's consultant team, conducted a Signal Timing Study within the Segments II and III study area along the SR 32 and US 50 corridors and in the Village of Newtown (from Newtown Road to Valley Avenue to Round Bottom Road).

- A "before study" was conducted in March and, following comprehensive analysis, a series of timing adjustments were implemented in August and September. Additional fine-tuning adjustments were made in October and November. An "after study" was completed in November.
- Stantec compared data from the "after study" with data from the "before study." Results included the following:
 - US 50 Corridor: Overall, travel time decreased by 9%, vehicle delays decreased by 32%, stop delays decreased by 42% and the average number of stops decreased by 33%. The average travel speed increased by 13%. Using ODOT's evaluation metrics, benefits of these improvements were determined to be:

• Benefit/Cost Ratio: 26:1

• Delay savings: 49,564 hours /\$1,014,262

Emission savings: 2.9 kg / \$10,221

• Crash Reductions: 5 crashes / \$121,800

• Fuel Savings: 20,623 gallons / \$45,061

Travel in both east and west directions improved during the morning, mid-afternoon and evening peak travel times.

 Village of Newtown: Overall, travel time decreased by 11%, vehicle delays decreased by 33%, stop delays decreased by 37% and the average number of stops decreased by 33%. The average travel speed increased by 13%. Using ODOT's evaluation metrics, benefits

of these improvements were determined to be:

Benefit/Cost Ratio: 51:1

• Delay savings: 22,868 hours / \$486,045

• Emission savings: 0.8 kg / \$2,736

• Crash Reductions: 1 crash / \$13,938

Fuel Savings: 3,298 gallons / \$7,205

Travel in both east and west directions improved during the morning, mid-afternoon and evening peak travel times.

- SR 32 Corridor: Overall, travel time decreased by 10%, vehicle delays decreased by 38%, stop delays decreased by 51% and the average number of stops decreased by 45%. The average travel speed increased by 9%. Using ODOT's evaluation metrics, benefits of these improvements were determined to be:

Benefit/Cost Ratio: 28:1

Delay savings: 21,901 hours / \$490,201

Emission savings: 0.03 kg / \$2,820

Crash Reductions: 2 crashes / \$53,205

Fuel Savings: 6,484 gallons / \$14,166

Travel in both east and west directions improved during the

- morning, mid-afternoon and evening peak travel times. However, westbound traffic (in the off-peak direction) has experienced slight increases in travel time and vehicle delays during evening peak period. These increases were intentional to improve travel in the peak direction.
- ODOT suggested that additional benefit can be gained by installing additional detection and modems in controllers to allow the lights to be interconnected and adaptive. With this technology, the lights would be better able to respond to variable traffic conditions and would automatically switch to different timing plans to help improve traffic flow.
 - This recommendation is being considered for implementation along with adding additional directional signage.
 - This project's safety scores are high, which increases the likelihood for securing funding.
 - Funding will likely be sought in 2019.
- ODOT also recommended adding right-turn signal heads at the intersections of Valley and Round Bottom and Valley and Church. Newtown is currently looking at advancing this signal improvement.

- · Include in Implementation Plan as a high priority.
- Enhance signals to provide advanced detection and wireless signal interconnect. High priority. Can be packaged with similar signal upgrades on SR 32 and near Red Bank interchange.
- Combine with additional signal backplates on US 50, wayfinding signage at Beechmont Circle and Red Bank, and advanced warning signage on US 50 eastbound.
- Add right-turn signal heads at Valley and Round Bottom and valley and Church.
- Possible HSIP funding.

US-50

<u>Pre-Study vs Optimized Timings</u>

Peak Hour Analysis

Timing	Direction	Travel Time	Vehicle Delay	Stopped Delay	Stops	Average Speed (mph)
		(sec)	(sec)	(sec)		(IIIpii)
			CUMULAT	IVE		
Pre-St	tudy	382	102	66	3.0	23.2
Optim	nized	349	69	38	2.0	26.3
% Cha	inge	-9%	-32%	-42%	-33%	13%
			AM Pea	k		
Pre-Study	EB	336	51	31	1.8	26.2
Optimized	EB	312	27	29	1.2	28.3
EB % Ch	nange	-7 %	-47%	-6%	-33%	8%
Pre-Study	WB	426	150	97	4.2	21.1
Optimized	WB	347	71	50	1.8	25.5
WB % C	hange	-19%	-53%	-48%	-57%	21%
			MIDDAY P	eak		
Pre-Study	EB	376	91	63	3.2	23.5
Optimized	EB	318	33	24	1.6	27.7
EB % Ch	nange	-15%	-64%	-62%	-50%	18%
Pre-Study	WB	385	109	62	3.8	22.8
Optimized	WB	397	121	38	1.4	27.3
WB % C	hange	3%	11%	-39%	-63%	20%
			PM Pea	k		
Pre-Study	EB	390	106	74	4.2	22.7
Optimized	EB	380	95	56	1.6	23.5
EB % Ch	nange	-3%	-10%	-24%	-62%	4%
Pre-Study	WB	380	104	68	3.5	23.1
Optimized	WB	342	66	31	1.6	25.6
WB % C	hange	-10%	-37%	-54%	-54%	11%



(Note: in the case of average speed, green means an increase in overall travel speed, whereas red means a reduction in overall travel speed)



Estimated Annual Signal Retiming Benefits

Corridor: US-50











				Traffic Operation	tions				R/W Impacts		Environmental Impacts				
Safety ECAT Benefit/Cost	Time		HCS Results	S	Tra	ansModeler Ro	esults	Construction Cost	Number of	R/W	Anticipated	Red Flag	Support and/or Facilitate	Improve Regional	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	0031	Relocations	Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	Access
								\$80K to \$120K (includes signal at Little Dry Run)	0	\$0	C1	No Impacts	Neutral	Neutral	Neutral

Newtown (Newtown Rd/Valley Ave/Round Bottom Rd) **Pre-Study vs Optimized Timings**

Peak Hour Analysis

		Travel	Vehicle	Stopped		Average Speed
Timing	Direction	Time	Delay	Delay	Stops	(mph)
		(sec)	(sec)	(sec)		
			CUMULAT			
Pre-St		236	80	76	3.0	19.3
Optim	ized	211	54	48	2.0	21.8
% Cha	inge	-11%	-33%	-37%	-33%	13%
			AM Pea	k		
Pre-Study	NB	237	63	70	2.6	19.2
Optimized	NB	234	60	62	2.0	19.1
NB % CF	nange	-1%	-5%	-11%	-23%	-1%
Pre-Study	SB	273	134	114	3.1	16.5
Optimized	SB	216	76	59	1.6	21.5
SB % Ch	ange	-21%	-43%	-48%	-48%	30%
			MIDDAY P	eak		
Pre-Study	NB	203	28	39	2.7	21.9
Optimized	NB	193	19	39	2.1	23.3
NB % CF	nange	-5%	-32%	0%	-22%	6%
Pre-Study	SB	209	70	48	1.9	21.5
Optimized	SB	191	52	33	1.4	23.8
SB % Ch	ange	-9%	-26%	-31%	-26%	11%
			PM Pea	k		
Pre-Study	NB	214	40	57	2.0	20.7
Optimized	NB	187	12	30	1.6	24
NB % CF	nange	-13%	-70%	-47%	-20%	16%
Pre-Study	SB	281	142	126	3.5	16.1
Optimized	SB	242	102	65	2.2	19.2
SB % Ch	ange	-14%	-28%	-48%	-37%	19%



Estimated Annual Signal Retiming Benefits

Corridor: Newtown Rd/Valley Ave/Round Bottom Rd



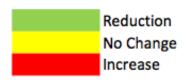






Benefit Cost Ratio





SR-32

<u>Pre-Study vs Optimized Timings</u>

Peak Hour Analysis

Timing	Direction	Travel Time (sec)	Vehicle Delay (sec)	Stopped Delay (sec)	Stops	Average Speed (mph)
			CUMULAT	IVE		
Pre-S	tudy	172	45	39	1.1	24.7
Optim	nized	155	28	19	0.6	26.8
% Cho	inge	-10%	-38%	-51%	-45%	9%
			AM Pea	k		
Pre-Study	EB	139	26	11	0.4	29.0
Optimized	EB	139	26	11	0.4	29.1
EB % Cl	nange	0%	0%	-1%	-6%	0%
Pre-Study	WB	203	62	50	1.2	21.0
Optimized	WB	182	42	29	1.0	22.9
WB % C	hange	-10%	-32%	-42%	-17%	9%
			MIDDAY P	eak		
Pre-Study	EB	142	29	15	0.8	28.3
Optimized	EB	129	16	0	0	30.7
EB % Cl	nange	-9%	-45%	-100%	-100%	8%
Pre-Study	WB	170	29	45	1.3	23.8
Optimized	WB	148	7	18	1.0	27.6
WB % C	hange	-13%	-76%	-60%	-23%	16%
			PM Peal	k		
Pre-Study	EB	210	98	71	1.8	20.1
Optimized	EB	156	43	13	0.5	25.9
EB % Cl	nange	-26%	-56%	-82%	-72%	29%
Pre-Study	WB	167	26	44	1.0	25.9
Optimized	WB	174	33	44	1.0	24.7
WB % C	hange	4%	27%	1%	0%	-5%



Estimated Annual Signal Retiming Benefits

Corridor: SR-32



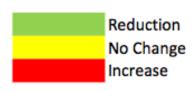












Identifier: I-4a (C1)

Concept drawn with Concept I-4b (C1).

DESCRIPTION

- Lengthen storage lanes (turn lanes) along SR 32 westbound and Little Dry Run Road northbound.
- Improve sight distance problems by improving the horizontal curve along Little Dry Run just south of SR 32.

NEEDS ADDRESSED

- P1) Address capacity issues on SR 32 and Little Dry Run.
- P3) Address westbound AM peak-hour delays.
- P4) Address congestion issues due to slow moving trucks and turning vehicles.
- S1) Address deficient sight distance on Little Dry Run approach to SR 32.

5/16 MEETING DISCUSSION AND COMMENTS

- Concept may have impacts on creek running parallel to SR 32.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Adjusting the curve provides better sight distance as drivers approach the signal at Little Dry Run and SR 32.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

- The Advisory Committee noted that feedback from the public was supportive with only 6% of respondents strongly opposing (3%) or disliking (3%) this option (see Public Feedback Ratings Summary, next page).
- Further discussion is noted under concept I-4c (C1).

NEXT STEPS/RECOMMENDATION

• Include project in Implementation Plan as a high priority, advancing with wither I-51 (B2) or 32-9 (C3).

				Traffic Operation	ons				R/W In	npacts	Environmen	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Result	s	Tra	ansModeler R	esults	Construction Cost	Number of	- 600	Anticipated	Red Flag	and/or Facilitate	Improve Regional	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$1.6M to \$2.4M (includes I-4b)	0	\$80K to \$160K (includes I-4b)	C2	R/W, Potential T&E, ESA Issues	Neutral	Neutral	Neutral

Theme: SR 32 - LITTLE DRY RUN TO EIGHT MILE ROAD, SR 32 & LITTLE DRY RUN OPTIONS

Identifier: I-4b (C1)

Concept drawn with Concept I-4a on the following page.

DESCRIPTION

 Add eastbound right lane on SR 32 at Little Dry Run Intersection (adjacent property is vacant).

NEEDS ADDRESSED

P1) Address capacity issues on SR 32 and Little Dry Run.

ANCOR/SR 32 HILL FOCUS AREA

- P4) Address congestion issues due to slow moving trucks and turning vehicles.
- S1) Address deficient sight distance on Little Dry Run approach to SR 32.

5/16 MEETING DISCUSSION AND COMMENTS

- This concept would result in a slight realignment at the intersection.
- No additional comment received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- This concept results in an improvement to PM peak traffic, reducing delays by 45 percent as compared to the No Build option; there is no improvement to AM peak traffic.
- The proposed dedicated right turn lane adds efficiency and reduces congestion by removing the turning traffic from the through traffic

flow. This will also improve safety by protecting turning traffic.

• No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C1 at the October Open House meetings.

• The Advisory Committee noted that feedback from the public was supportive with only 6% respondents strongly opposing (3%) or disliking (3%) this option (see Public Feedback Ratings Summary, next page).

- The addition of a right turn lane could be included in concept I-5a (B2), which addresses the intersection of SR 32 and Round Bottom Road and includes an additional eastbound lane that ends as a right turn at Little Dry Run.
- Include project in Implementation Plan as a high priority, advancing with either 1-5a (B2) or 32-9 (C3).

				Traffic Operation	ons				R/W Ir	npacts	Environmer	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Result	5	Tra	ansModeler Ro	esults	Construction Cost	Cost Number of		Anticipated	Red Flag	and/or Facilitate	Improve Regional	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environment al Document	Triggers	Multi-Modal	Connectivity	
	AM	47.2	D	0%				\$1.6M to		\$80K to		R/W, Stream Impact, Waterway			
	PM	33.0	С	45%				\$2.4M (includes I-4a)	0	\$160K (includes I-4a)	C2	Permit, Potential T&E, ESA Issues	Neutral	Neutral	Neutral

Identifier: I-4b (C1)

Concept drawn with Concept I-4a.



SR 32 and Little Dry Run Intersection Improvements

- \$1.6M to \$2.4M construction cost
- New R/W needed from 5 parcels; no buildings impacted
- Reduce delay during PM peak by approximately 45%
- Modify curve on Little Dry Run to improve visibility at intersection
- Walls required along SR 32 to protect creek

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
3%	3%	35%	26%	32%

DESCRIPTION

• Install a continuous Green Tee intersection at Little Dry Run. This would allow traffic continuing in the westbound lane to flow continuously and bypass the signal.

NEEDS ADDRESSED

- P1) Address capacity issues on SR 32 and Little Dry Run.
- P3) Address westbound AM peak-hour delays.
- P4) Address congestion issues due to slow moving trucks and turning vehicles.
- S1) Address deficient sight distance on Little Dry Run approach to SR 32.

5/16 MEETING DISCUSSION AND COMMENTS

- This concept combines elements of Concepts I-4a and I-4b.
- Initial analysis suggests implementation of the Green Tee intersection would dramatically improve westbound AM peak-hour delays.
- The impact of implementing this concept for traffic signals farther west on SR 32 will need to be evaluated. Currently, there is no coordination between these signals.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Considered on its own, this concept works well, resulting in an improvement to AM and PM peak traffic, reducing delays by 91 percent (AM) and 48 percent (PM) as compared to the No Build option.
- TransModeler simulations take downstream traffic into effect, assuming signal timing improvements at intersections of SR 32 with Church Street, Round Bottom Road and Ivy Hills Place but no other capacity improvements. Those show a 46 percent decrease in AM peak delays and 58 percent PM delay decrease.
- The Committee expressed concerns that traffic delays encountered farther west (e.g., at intersections of SR 32 with Church, Round Bottom and Ivy Hills, as well as the intersection of Church and Valley Ave.) will impact how much benefit this improvement provides.
- This is why it will be important to prioritize improvements throughout the corridor. For example, it may be more valuable to address issues at Round Bottom or Church and SR 32, which consider westbound AM traffic delays, prior to considering improvements at Little Dry Run.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C2 at the October Open House meetings.

- The Advisory Committee noted that feedback from the public was generally supportive with 32% of respondents strongly supporting and 32% liking this option (see Public Feedback Ratings Summary, next page).
- The committee reviewed comments submitted from the public and noted the accuracy of one comment that stated the volume of traffic on westbound SR 32 would make it difficult for motorists attempting

Concept drawn on the following page.

to turn onto SR 32 from Little Dry Run during peak travel times.

• ODOT/Stantec suggested not pursuing this option until improvements in Newtown are complete.

- Advance this option, but reevaluate and construct only after congestion issues on westbound SR 32 further west have been addressed by B2.
- Include project in Implementation Plan as a low priority.

				Traffic Operation	ons				R/W Im	pacts	Environmen	tal Impacts	Support		
fety ECAT nefit/Cost	Time		HCS Results	3	Tra	ans Modeler Ro	esults	Construction Cost	Number of	- 6	Anticipated	Red Flag	and/or Facilitate	Improve Regional	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
	AM	4.3	А	91%	7.9	А	46%	¢4 0N4+-		ĆEOV.		R/W, Stream Impact, Waterway			
	PM	31.6	С	48%	16.8	В	58%	\$1.9M to \$2.8M	0	\$50K to \$100K	C2	Permit, Potential T&E, ESA Issues	Neutral	Neutral	Neutral



Signalized Green Tee Intersection at SR 32 and Little Dry Run

- \$1.9M to \$2.8M construction cost
- New R/W needed from 5 parcels; no buildings impacted
- Reduce delay during AM peak by approximately 90%; PM peak by approximately 50%
- Westbound thru movement bypasses traffic signal
- Modify curve on Little Dry Run to improve visibility at intersection
- Wall required along SR 32 to protect creek

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
5%	11%	20%	32%	32%

Concept not drawn.

Identifier: 32-8

DESCRIPTION

• Need speed study on SR 32 at Little Dry Run to consider lower legal speed.

NEEDS ADDRESSED

None identified.

5/16 MEETING DISCUSSION AND COMMENTS

- · Concept was not discussed at the meeting.
- No additional comments were received following 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- A speed reduction on SR 32 between Ivy Hills Place and the eastern corp. limit was approved. Speed was reduced from 50 to 45 m.p.h.
- At the 9/5 meeting, representatives of the Village of Newtown inquired as to when speed limit signs would be adjusted. Tom Arnold will follow up with timing details.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

 Newtown has completed the speed reduction study and reducing the speed from 50 mph to 45 mph has been approved. ODOT is currently preparing to install new speed limit signs.

NEXT STEPS/RECOMMENDATIONS

ODOT to install new speed limit signs soon based on results of speed study.

Safety	Traffic Operations	Constructability Issues	Construction Cost	R/W Impacts	Environmental / Community Impacts	Supports and/or Facilitates Multi- Modal	Improve Regional Connectivity	Improve Local Access	RECOMMENDATION
			Village of Nev	vtown to adv	nce this cond	ept.			NEWTOWN WILL ADVANCE

Concept drawn on following page.

DESCRIPTION

 Add center turn lane from Little Dry Run to Newtown's east corp. limit.

NEEDS ADDRESSED

- P1) Address capacity issues on SR 32 and Little Dry Run.
- P3) Address westbound AM peak-hour delays.
- P4) Address congestion issues due to slow moving trucks and turning vehicles.

5/16 MEETING DISCUSSION AND COMMENTS

- · Concept was not discussed at the meeting.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Village of Newtown has been investigating this concept with Brandstetter Carroll.
- Center turn lane would be beneficial to business and residents east of Little Dry Run.
- Brandstetter Carroll to share work to date with Stantec/ODOT.
- No additional comments were received following the 9/5 meeting.

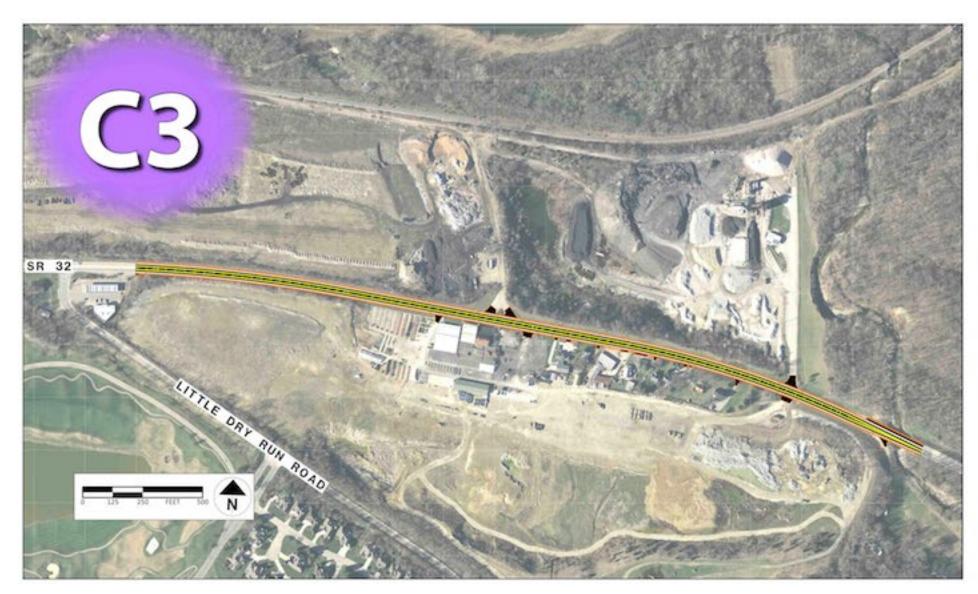
12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C3 at the October Open House meetings.

- The committee noted that this project was received favorably by the public; 35% Strongly Support, 27% Like. (see Public Feedback Ratings Summary, next page).
- There may also be benefit to building this project in conjunction with the proposed ANCOR connector which would provide a new link between SR 32 and Broadwell [see concepts A-1 (C10) and A-2 (C11)].
- ODOT noted that the left-turn lane created by this project would complement the ANCOR connector project.
- This option could logically be bundled with concept I-5a (B2), which
 addresses the intersection of SR 32 and Round Bottom Road and
 includes an additional eastbound lane that ends as a right turn at
 Little Dry Run. Other modifications could be considered from 4a (C1)
 or I-4b (C1) as funding allows.
- It was noted that the Village of Newtown is to receive funding to complete a storm water replacement project but it may be waiting to see what will happen with this project before proceeding.
 - If the storm water project is subject to a funding time limit, it may be possible to coordinate the completion of that project with this one. The Village would prefer not to "move dirt" twice.
 - The storm water project will benefit Burger Farm's plans for developing its 80 acres, and Burger is ready to proceed with their plans.
 - Access to the Burger development would remain through the main entrance of of SR 32. There also is a potential second entrance point on Little Dry Run that will allow access to the future wedding event center, sports complex parking lot and other development components such as condos.
- Mr. Burger noted that there would likely be little interest in a shareduse path along the west side of Little Dry Run leading to SR 32 because the area will be developed for 'agri-tourism' and 'agritainment' and will need to include a parking lot for 700-800 cars.

- Include project in the Implementation Plan as a high priority.
- Considering including a sidewalk or shared-use path with the project as outlined in concept 32-7 (B6).
- Possible HSIP funding.

				Traffic Operation	ons				R/W In	npacts	Environment	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Results	S	Tr	ansModeler R	esults	Construction Cost	Number of	2/14/2	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	connectivity	
0.3								\$1.0M to \$1.5M					Neutral	Neutral	Improves



SR 32 Widening for Center Turn Lane

- \$1.0M to \$1.5M construction cost
- · Little Dry Run to east corp. limit
- Possible new R/W needed; no buildings impacted
- Being developed by Village of Newtown

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
2%	11%	26%	27%	35%

Concept drawn on the following page.

DESCRIPTION

· Add westbound left turn lane at Hickory Creek Drive.

ANCOR/SR 32 HILL FOCUS AREA

NEEDS ADDRESSED

- P2) Address rear-end crashes on SR 32 related to left turns onto Hickory Creek Drive.
- P3) Address westbound AM peak-hour delays.
- P4) Address congestion issues due to slow moving trucks and turning vehicles.

5/16 MEETING DISCUSSION AND COMMENTS

- Concept would help address rear-end crashes at this intersection.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Because of the volume of traffic on SR 32, there are few gaps for drivers attempting to turn left onto Hickory Creek Drive, which provides access to a small subdivision.
- It's possible this project could be addressed with safety funding; that would require a more detailed cost/benefit analysis.
- · While there are rear-end crashes at this intersection, it is not ranked

as a high-crash location by ODOT.

No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C4 at the October Open House meetings.

- The Advisory Committee noted that feedback from the public tended toward neutral, with 44% people giving the project a neutral rating (see Public Feedback Ratings Summary, next page). It was also noted that there are only 10-12 residential properties in the affected area and most survey respondents probably do not live there.
- The committee agreed to designate this concept as a low priority in the Implementation Plan because of the low impact this project would have
- This project does not currently qualify for ODOT safety funds, nor is it is expected to attract other funding sources.

NEXT STEPS/RECOMMENDATION

· Include project in Implementation Plan as a low priority.

				Traffic Operation	ons				R/W Im	npacts	Environmen	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Result	S	Tra	ansModeler R	esults	Construction Cost	Number of	- 6	Anticipated	Red Flag	and/or Facilitate	Improve Regional	Improve Local Access
	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$1.3M to \$1.9M	0	\$0 to \$30K	C2	R/W, Stream Impact, Waterway Permit, Potential T&E	Neutral	Neutral	Improves



Left Turn Lane at Hickory Creek

- \$1.3M to \$1.9M construction cost
- New R/W needed from 8 parcels; no buildings impacted
- Addresses rear-end crashes and morning congestion
- · Requires one retaining wall

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
5%	11%	44%	20%	20%



Eastern Corridor Segments II and III ANCOR/SR 32 Hill Focus Area

Theme

SR 32 – EIGHT MILE ROAD AND SR 32 HILL

Primary Needs identified for this theme:

- P5) Address capacity issues on Eight Mile Road.
- P6) Address safety issues for vehicles turning at Eight Mile Road.
- P7) Address deficient sight distance and roadway grade issues.
- P8) Address crash trends on the SR 32 hill.
- P9) Address roadway grade deficiencies on the SR 32 hill to improve truck mobility.
- P10) Address roadway curve deficiencies on the SR 32 hill.

Secondary Needs identified for this theme:

None.

Concept drawn on the following page.

DESCRIPTION

- Install a signalized continuous Green Tee intersection at Eight Mile Road.
 - Signal would manage flow through the SR 32/Eight Mile intersection and control left-hand turns onto Eight Mile from westbound SR 32.
 - A dedicated westbound lane on SR 32 would allow westbound traffic to flow continuously through the SR 32 and Eight Mile intersection; no stopping needed.

NEEDS ADDRESSED

- P5) Address capacity issues on Eight Mile Road.
- P6) Address safety issues for vehicles turning at Eight Mile Road.
- P7) Address deficient sight distance and roadway grade issues.

5/16 MEETING DISCUSSION AND COMMENTS

- Right of way or easements would be needed to modify the SR 32/Eight Mile intersection.
- This concept could be a first step leading toward the future construction of Concept 1-3e.
- This concept would address grade issues on Eight Mile but not on the SR 32 hill.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- This concept doesn't provide vertical grade correction of the SR 32 hill.
- Slow traffic heading up the hill could be an issue for heavily loaded trucks; however, because the concept provides two lanes up the hill, trucks would be able to move into the right lane instead of being forced into the left lane as they are today.
- This alternative will provide a protected left turn onto Eight Mile from westbound SR 32 which will improve safety at the intersection.
 Congestion also will be reduced by providing a turn lane to facilitate left turns without slowing down the flow of traffic.
- No additional comments were received following the 9/5 meeting.

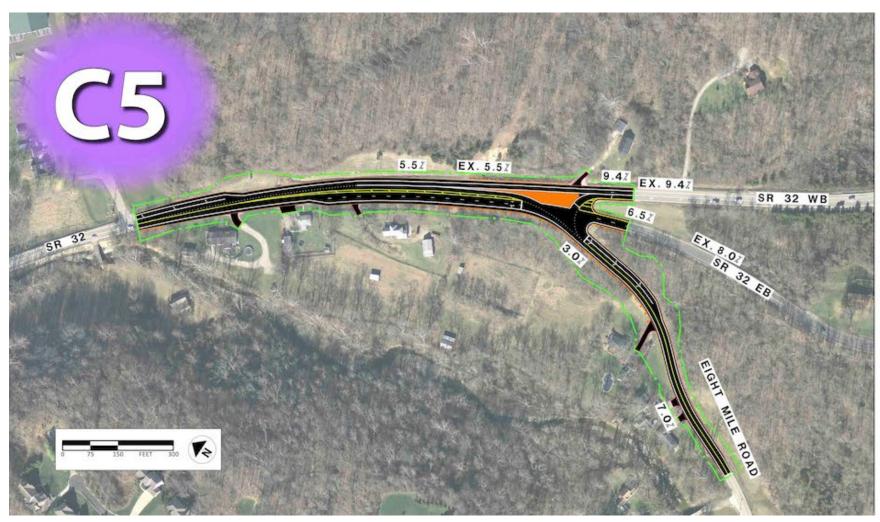
12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C5 at the October Open House meetings.

- The right turning movement from northbound Eight Mile Road to eastbound SR 32 should be studied further to account for trucks that turn wide and encroach into the opposite lane.
- This intersection ranks on ODOT's statewide crash list. The committee agreed that this high crash rate makes implementing this concept a high priority.
- This concept should include the additional warning signs, as outlined in concept 32-16, to alert drivers that the left lane is ending at Eight Mile.

- Include project in Implementation Plan as a high priority.
- Consider including advanced signing as outlined in 32-16.
- This concept could function as Phase 1 of concept C6.
- HSIP and STP funding could be used on this project.
- Reevaluate the right turn from Eight Mile to eastbound SR 32 to see if minor realignment can improve acute angle.

				Traffic Operation	ons				R/W Im	npacts	Environmen	tal Impacts	Support			
Safety ECAT Benefit/Cost	Time		HCS Results	3	Tra	ans Modeler Re	esults	Construction Cost	Number of	2/14/0	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access	
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	connectivity		
	АМ	8.8	А	79%				¢2.0N4+-		¢100K t-		R/W, Stream Impact,				
-0.5	PM	19.3	В	71%				\$2.0M to \$3.1M	0	\$100K to \$200K	C2	Waterway Permit, Potential T&E	Neutral	Neutral	Neutral	



Signalized Green Tee Intersection at SR 32 and Eight Mile

- \$2.0M to \$3.1M construction cost
- New R/W needed from 11 parcels; no buildings impacted
- Reduce delay by approximately 75%
- New traffic signal
- Westbound thru movement bypasses signal
- Improves grade on Eight Mile; no grade changes on SR 32
- Reduces the likelihood of severe crashes

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
8%	10%	33%	19%	30%

Concept drawn on the following page.

DESCRIPTION

- New alignment and grade separation of eastbound SR 32 over Eight Mile; signalized continuous Green Tee intersection at Eight Mile and westbound SR 32.
 - Incorporates Concept I-3b (signalized Green Tee intersection).
 - Eastbound SR 32 traffic would travel on new bridge over Eight Mile Road.
 - A new traffic signal would direct traffic entering SR 32 from Eight Mile Road.

NEEDS ADDRESSED

- P4) Address congestion issues due to slow moving trucks and turning vehicles.
- P5) Address capacity issues on Eight Mile Road.
- P6) Address safety issues for vehicles turning at Eight Mile Road.
- P7) Address deficient sight distance and roadway grade issues.
- P8) Address crash trends on the SR 32 hill.
- P10) Address roadway curve deficiencies on the SR 32 hill.

5/16 MEETING DISCUSSION AND COMMENTS

- Primary concerns in this area relate to travel speed and the grade of the road.
 - Currently, it can be difficult for drivers of large vehicles and trucks to reach 50 55 mph when traveling eastbound.

- Concerns regarding grade are tied directly to the movement of freight along SR 32.
- The new eastbound SR 32 alignment would reduce the grade on the SR 32 hill to 7.5%. A 6% grade is considered the desired maximum.
- Concept would eliminate the "S" curve on the SR 32 hill, a documented crash location.
- Concept would use as much existing pavement as possible but would require right-of-way and/or easement acquisitions for widening portions of SR 32.
- Construction of new alignment may require acquiring several residential properties.
- No changes would be made to westbound SR 32.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- This concept shows improvement to traffic flow and improves the grade on the eastbound portion of the SR 32 hill where it ties into the new alignment. Grade decreases from the current 8 percent to 5.7 percent.
- This concept could be phased as the second portion of the Green Tee intersection (Concept I-3b).
- Trucks traveling up the hill could use the right lane instead of being forced into the left lane as they are today.
- This concept requires the acquisition of six residences.
- No additional comments were received following the 9/5 meeting.

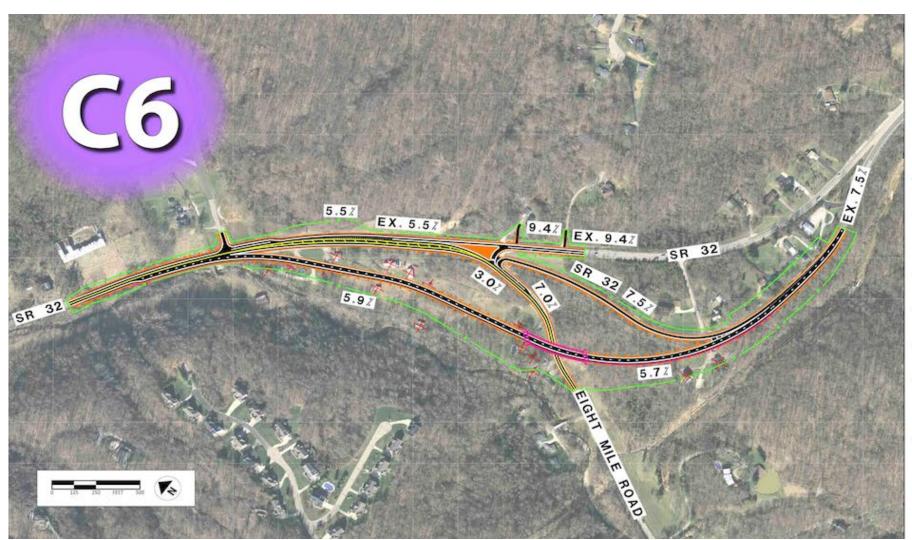
12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C6 at the October Open House meetings.

- It was noted that this project would solve half of the hill's steep grade issue, which could be favorable to trucks.
- A written comment received from the public noted that this proposed new alignment would impact designated green space, which is protected by Anderson Township. Anderson Township will look into this in more detail. If confirmed, then the green space may be an obstacle to completing the project. Mitigation may be necessary if the project were to advance.
- This project would impact residents in the area. If it were to move forward, more public involvement would be needed.
- The estimated cost for the project is high. Transportation Review Advisory Council (TRAC) funding may be necessary, as well as other funding sources.
- The committee discussed building concept I-3b (C5) first, then reassessing the need for concept I-3e (C6).

- Include project in Implementation Plan as a medium priority.
- Consider including advanced signing as outlined in 32-16.
- Could be phased by building I-3b (C5) first and adding new eastbound lanes at a later date.

				Traffic Operation	ons				R/W Im	pacts	Environmen	tal Impacts	Support			
Safety ECAT Benefit/Cost	Time		HCS Result	S	Tra	ansModeler Ro	esults	Construction Cost	Number of	_	Anticipated	Red Flag	and/or Facilitate	Improve Regional	Improve Local Access	
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity		
	AM	1.5	А	96%	2.6	А	78%	¢11.784+0		\$1.9M to		R/W,				
0.0	РМ	2.5	А	96%	3.4	А	96%	\$11.7M to \$17.5M	6 residential	\$3.7M	D2	relocations, Section 4(f)	Neutral	Neutral	Neutral	



New SR 32 Eastbound Alignment and Grade Separation over Eight Mile

- \$11.7M to \$17.5M construction cost
- New R/W needed from 26 parcels; including 9 residential relocations
- Reduce delay by approximately 90%
- Improves eastbound grade of SR 32
- Improves grade of Eight Mile
- No signal needed at SR 32 and Eight Mile
- Reduces likelihood of severe crashes

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
10%	8%	30%	31%	21%

ANCOR/SR 32 HILL FOCUS AREA

Concept drawn on the following page.

DESCRIPTION

- Reduce grade on SR 32 hill by grade separating the Beechwood/Old SR 74 and Eight Mile intersections. Includes:
 - Constructing a two-way frontage road on north side of new SR 32 alignment
 - Constructing low speed connections at Eight Mile and a new roundabout interchange at Beechwood.

NEEDS ADDRESSED

- P4) Address congestion issues due to slow moving trucks and turning vehicles.
- P5) Address capacity issues on Eight Mile Road.
- P6) Address safety issues for vehicles turning at Eight Mile Road.
- P7) Address deficient sight distance and roadway grade issues.
- P8) Address crash trends on the SR 32 hill.
- P9) Address roadway grade deficiencies on the SR 32 hill to improve truck mobility.
- P10) Address roadway curve deficiencies on the SR 32 hill.
- P12) Address capacity issues on eastbound SR 32 and southbound Beechwood.
- P13) Address safety issues at Beechwood intersection.
- P14) Address westbound PM peak-hour delays.

5/16 MEETING DISCUSSION AND COMMENTS

· Concept would adjust the grade on the SR 32 hill to a maximum of

5.5%.

- Concept would create two grade-separated interchanges at which SR
 32 would travel under Eight Mile Road and Beechmont Road
 - Access from Eight Mile to/from eastbound SR 32 would shift to the west, while connections to/from westbound SR 32 would shift east
 - A grade-separated interchange with roundabouts at the ramp terminals (where the ramps meet the roadways) would connect SR 32 with Beechwood Road and Old 74.
- Concept would require acquiring private property.
- Concept would impact access to businesses on the south side of SR 32 at the top of the hill.
- Eight Mile Road would travel on new alignment along the north side of SR 32 and terminate in an intersection with Beechwood Road.
- Project costs are expected to be very high.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- This is the only concept that provides full grade improvements on the SR 32 hill, reducing the grade from 8 percent to preferred design standards of 5.5 percent.
- It would not be possible to phase this concept.
- The Committee asked how much grade correction of the hill should be prioritized when evaluating alternatives. The steepness of the existing hill grade is an issue for trucks as well as a safety consideration. The goal, however, is not to try to design to textbook standards but to make practical improvements that address identified needs.

No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C7 at the October Open House meetings.

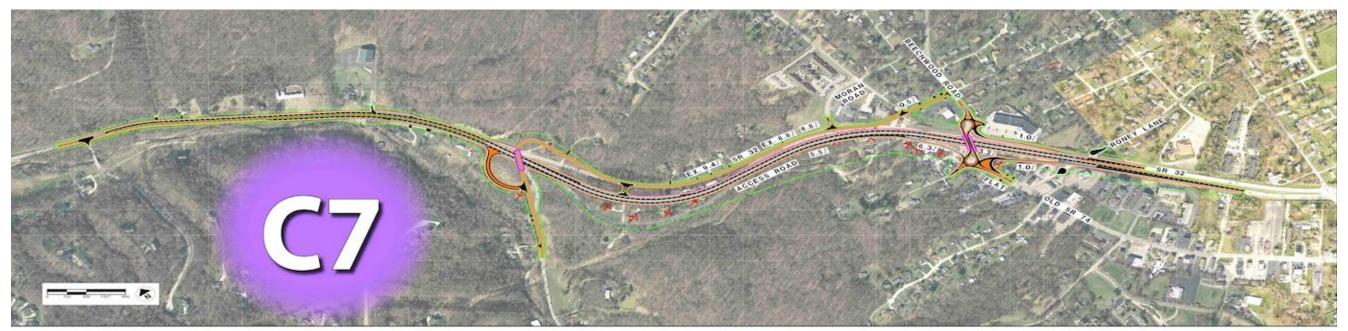
- This concept would reduce the grade on the SR 32 hill from 8% to a maximum of 5.5%.
- The committee discussed building concept I-3b (C5) first, then reassessing the need for concept I-3e (C6) but not pursuing this concept [32-18-2 (C7)].
 - Reducing the grade of this hill would be a massive project and very expensive to complete.
- Committee members expressed concern with slowing the momentum of trucks on the hill. Other projects would create a climbing lane which would help trucks maintain their climbing speed.
- The committee also discussed the need for drivers to stay in their lanes. Perhaps people would stay in their travel lanes more often if the turning radius in increased or a wider right lane is provided.
- The committee agreed that this project should be a low priority due to large impacts and high costs.

NEXT STEPS/RECOMMENDATION

• Include project in Implementation Plan as a low priority.

				Traffic Operation	ons				R/W In	npacts	Environmen	tal Impacts			
Safety ECAT			HCS Result	S	Tra	ansModeler R	esults	Construction			Anticipated		Support and/or	Improve	Improve Local
Benefit/Cost	Time Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	Cost	Number of Relocations	R/W Cost	Environmental Document	Red Flag Triggers	Facilitate Multi-Modal	Regional Connectivity	Access
	AM	7.5	А	82%				\$37.4M to	6 residential	\$2.4M to	D2 - History	R/W,	News		D
	PM	6.0	А	91%				\$56.1M	commercial	\$4.8M	D3 or higher	relocations	Neutral	Improves	Degrades

Identifier: 32-18-3 (C7)



New SR 32 Alignment to Create Grade Separated Interchanges

- \$37.4M to \$56.1M construction cost
- New R/W needed from 55 parcels, including 9 residential and 6 commercial relocations
- Reduce delay by approximately 85%
- Improves grade of SR 32 to a maximum of 5.5%
 Adds interchanges at Beechwood and Eight Mile
 Extends Eight Mile to Beechwood

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
15%	12%	30%	22%	22%

Identifier: 32-15

Concept not drawn.

DESCRIPTION

• Realign curve on eastbound SR 32 hill.

NEEDS ADDRESSED

P8) Address crash trends on the SR 32 hill.

P10) Address roadway curve deficiencies on the SR 32 hill.

5/16 MEETING DISCUSSION AND COMMENTS

- Concept has not been drawn as the curve correction is best accomplished through other proposed concepts that modify SR 32's alignment/profile.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- · Discussed and evaluated with other concepts.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

· No discussion held.

NEXT STEPS/RECOMMENDATION

• Advance with concepts I-3e (C6) and 32-18-3 (C7).

Safety	Traffic Operations	Constructability Issues	Construction Cost	R/W Impacts	Environmental / Community Impacts	Supports and/or Facilitates Multi- Modal	Improve Regional Connectivity	Improve Local Access	RECOMMENDATION
		Concept to be	evaluated as	part of Conce	pts I-3d, I-3e,	and 32-18.			ADVANCING WITH CONCEPTS I-3d, I-3e and 32-18

RECOMMENDATION: ADVANCE WITH CONCEPTS I-3e (C6) and 32-18-3 (C72)

Concept not drawn.

DESCRIPTION

• Investigate removing vegetation to improve sight distance at intersection of SR 32 and Eight Mile Road.

NEEDS ADDRESSED

P7) Address deficient sight distance and roadway grade issues.

5/16 MEETING DISCUSSION AND COMMENTS

- · None discussed.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Vegetation will be trimmed to improve sight distance for drivers turning left.
- A comment was made as to whether the cut area could be seeded for pollinator habitat.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This project has been added to ODOT's 2019 pruning contract (PID 101383).

NEXT STEPS/RECOMMENDATION

• Include in the Implementation Plan as a high priority.

				Traffic Operati	ons				R/W Im	pacts	Environmen	tal Impacts	Support		
Safety ECAT Benefit/Cost Ratio	Time		HCS Result	s	Tr	ansModeler R	esults	Construction Cost	Number of	2/11/2	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$15K to \$22.5K	0	\$0	C1	None	Neutral	Neutral	Neutral

Theme: SR 32-EIGHT MILE ROAD AND SR 32 HILL, MAINTENANCE OPTIONS

Identifier: 32-13

Concept not drawn.

DESCRIPTION

- Add friction pavement to the surface of SR 32.
 - Friction pavement is a texturized surface treatment that will allow tire treads to better grip the road.

NEEDS ADDRESSED

P8) Address crash trends on the SR 32 hill.

5/16 MEETING DISCUSSION AND COMMENTS

- ODOT conducted pavement tests in Spring 2018 and determined that friction pavement course was warranted.
- Implementation of this concept will be completed as part of an upcoming ODOT project (PID 107133). Work will begin in spring/summer 2019.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- This project is funded and advancing as part of ODOT project PID 107133 next spring/summer.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

• This project will be included as part of a planned spot safety project (PIC 107133) that will take place in the spring/summer of 2019.

NEXT STEPS/RECOMMENDATION

• Include in Implementation Plan as a high priority. Advance to construction as part of ODOT project PID 107133.

	Safety ECAT Benefit/Cost Ratio				Traffic Operation	ons				R/W Im	pacts	Environment	al Impacts	Support		
		Time		HCS Result	s	Tra	ansModeler R	esults	Construction Cost	Number of	D (1) (1)	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
		Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
										0	\$0	C1	None	Neutral	Neutral	Neutral

Theme: SR 32 -EIGHT MILE ROAD AND SR 32 HILL, MAINTENANCE OPTIONS

Identifier: 32-16

Concept not drawn.

DESCRIPTION

• Add warning signs about lane reduction on westbound SR 32.

NEEDS ADDRESSED

P8) Address crash trends on the SR 32 hill.

5/16 MEETING DISCUSSION AND COMMENTS

- Propose additional ground mounted signs to warn motorists of the drop lane near or before the top of the hill.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- While there are existing signs today indicating that the left lane must turn left, given the speed here these signs could be larger. Consultant proposes the addition of oversized signs.
- ODOT is advancing this project.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

 This project could be included with concepts I-3b (C5) or I-3e (C6) or could be bundled with other low cost projects like signal improvements.

- Include project with concepts I-3b (C5) or I-3e (C6) or with another low cost project bundle.
- Highway Safety Improvement Program (HSIP) funding could possible be used for this project.

	Safety ECAT Benefit/Cost Ratio				Traffic Operation	ons				R/W In	pacts	Environmen	tal Impacts	Support		
		Time		HCS Result	S	Tra	ansModeler Ro	esults	Construction Cost	Number of	D/W 01	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
		Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
									\$9.5K to \$14.3K	0	\$0	C1	None	Neutral	Neutral	Neutral



Eastern Corridor Segments II and III ANCOR/SR 32 Hill Focus Area

Theme

SR 32 - BEECHWOOD ROAD TO BELLS LANE

Primary Needs identified for this theme:

- P12) Address capacity issues on eastbound SR 32 and southbound Beechwood.
- P13) Address safety issues at Beechwood intersection.
- P14) Address westbound PM peak-hour delays.
- P15) Address capacity issue for westbound left turn at Bells Ln.*
- P16) Accommodate observed pedestrian traffic.*

*Note: These needs already have been addressed in project CLE 32-0.63, which is scheduled for construction in summer 2018.

Secondary Needs identified for this theme:

None.

Identifier: I-2a

Concept not drawn.

DESCRIPTION

· Improve signal timing.

NEEDS ADDRESSED

- P12) Address capacity issues on eastbound SR 32 and southbound Beechwood.
- P14) Address westbound PM peak-hour delays.

5/16 MEETING DISCUSSION AND COMMENTS

- This intersection is not part of the corridor signal timing study since it is remote to the other signals; however, signal timing upgrades will be evaluated.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- Committee members indicated it is difficult to turn left from Beechwood onto eastbound SR 32 as drivers do not receive an arrow there. ODOT's consultant will review this issue.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

• Stantec noted that traffic signals in the area should be coordinated with signals east of Bells Lane, moving toward I-275. These signals are being replaced as a part of a project to be completed in 2019.

 ODOT is planning a study to reevaluate the signals on SR 32 between I-275 to Glen-Este once construction at those intersections is completed.

- ODOT to conduct signal retiming study with the signals to the east at Mount Carmel Tobasco/Bells Lane and Old SR 74, once construction at those intersections is completed.
- Include project in Implementation Plan as a high priority.

				Traffic Operation	ons				R/W Im	pacts	Environmen	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Results	S	Tra	ansModeler Ro	esults	Construction Cost	Number of	2/11/2	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations R/W Cost	K/W Cost	t Environmental Document	Triggers	Multi-Modal	Connectivity	
	AM	23.5	С	10%									Neutral	Noutral	Neutral
	PM	29.6	С	5%									iveutrai	Neutral	iveutrai

Theme: SR 32 - BEECHWOOD ROAD TO BELLS LANE

Identifier: I-2b (C8)

Concept drawn on the following page.

DESCRIPTION

- Lengthen northbound, southbound and eastbound left turn lanes at Beechwood intersection.
- Adjust approach curve on Old SR 74 to improve sight distance.

NEEDS ADDRESSED

- P12) Address capacity issues on eastbound SR 32 and southbound Beechwood.
- P13) Address safety issues at Beechwood intersection.

5/16 MEETING DISCUSSION AND COMMENTS

- Concept provides additional dedicated space for vehicles to wait (queue) for a turn signal; would improve the flow for cars continuing straight.
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- A member of the Committee asked whether it would be possible to consider straightening the approach from Old SR 74 to SR 32 to alleviate sight issues for drivers turning left. ODOT's consultant will look into this idea.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C8 at the October Open House meetings.

- Public feedback received for this project tended to be neutral (40%) to favorable (25% Like, 15% Strongly Support). See Public Feedback Ratings Summary, next page.
- The committee agreed to designate this project as a low priority because this is not a high accident area.
- A committee member asked about the crash rate at next intersection (SR 32 and Moran Rd). ODOT replied that there is no crash data available for that intersection.
 - The committee noted that, earlier in the project development process, consideration had been given to adding medians and other demarcations to assist turns, but these options were eliminated throughout the course of this study process.

NEXT STEPS/RECOMMENDATION

• Include project in Implementation Plan as a low priority.

				Traffic Operation	ons				R/W In	npacts	Environmen	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Results	5	Tr	ansModeler R	esults	Construction Cost	Number of	2000	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$280K to \$420K	0	\$0	D2	Section 4(f)	Neutral	Neutral	Neutral

Identifier: I-2b (C8)



SR 32 and Beechwood Intersection Improvements

- \$280,000 to \$420,000 construction cost
- New R/W needed from 6 parcels; no buildings impacted
- Modify curve on Old SR 74 to improve visibility at intersection
- Lengthen left turn lanes on three approaches

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
5%	2%	40%	38%	16%

Identifier: I-9 (C9)

Concept drawn on the following page.

DESCRIPTION

• Improve Broadwell Road and Round Bottom Road intersection to accommodate turning movements of large trucks

NEEDS ADDRESSED

(Note: the need outlined below was identified during the course of multiple Advisory Committee meetings and was not included in the Segments II and III Transportation Needs Analysis report.)

 Address safety issues of large trucks making right turns from Broadwell to Round Bottom and crossing the double yellow line.

5/16 MEETING DISCUSSION AND COMMENTS

New concept?

9/5 MEETING DISCUSSION AND COMMENTS

New concept?

12/10 MEETING DISCUSSION AND COMMENTS

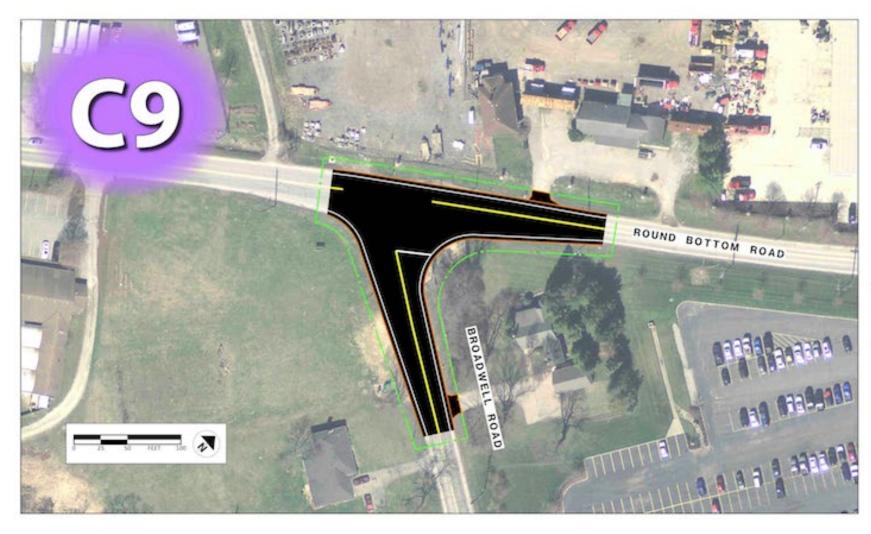
This concept was presented as C9 at the October Open House meetings.

- The recorded number of crashes at this intersection is low, however, large trucks have difficulty making the right turn from Broadwell to Round Bottom and frequently cross over the double yellow line into the opposite side of the road. This concept would help keep trucks from crossing into on-coming traffic.
- ODOT noted that this project would be even more important if the Martin Marietta mining work moves forward; if it does, increased truck traffic is expected at this intersection.
- A committee member noted that this concept would improve the safety of drivers coming westbound on Round Bottom Road.
- A committee member mentioned that because the hill to the east of this intersection limits sight lines for drivers, trucks and drivers are unable to see oncoming traffic when attempting to turn from Broadwell onto Round Bottom.
- Hamilton County will be repaving Broadwell Road in the summer of 2019. ODOT suggested applying for safety funds to include this concept in the paving project.
- The committee agreed to designate this concept as a high priority, noting that there is benefit to the project and estimated costs are not too high.

- Include project in Implementation Plan as a high priority.
- Discuss concepts and related issues with the local sheriff before finalizing any decisions.
- Explore adding project into Hamilton County's 2019 repaying effort.

Traffic Operations						R/W Impacts		Environmental Impacts		Support	Improvo				
Safety ECAT Benefit/Cost	Time		HCS Result	s	Tra	ansModeler Ro	esults	Construction Cost	Number of	D /hu Gaar	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$100K to \$175K	0	\$15K to \$30K	C2		Neutral	Neutral	Neutral

Identifier: I-9 (C9)



Improve Broadwell and Round Bottom Intersection for Truck Turns

- \$100,000 to \$175,000 construction cost
- New R/W needed from 2 parcels; no buildings impacted

PUBLIC FEEDBACK RATINGS SUMMARY

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
8%	7%	44%	25%	16%



Eastern Corridor Segments II and III ANCOR/SR 32 Hill Focus Area

Theme

CONNECTIVITY BETWEEN SR 32 AND ANCOR

Primary Needs identified for this theme:

P11) Improve freight connections between ANCOR and SR 32/I-275 due to constraints on Mt. Carmel Rd., Round Bottom Rd. and SR 32 to support local economic development plans.

Secondary Needs identified for this theme:

S3) Address roadway grade deficiency at Round Bottom Rd. and Broadwell Rd.

Theme: CONNECTIVITY BETWEEN SR 32 AND ANCOR

Concept drawn with Concept A-2 (C11).

Identifier: A-1 (C10)

DESCRIPTION

- Add access road from Newtown's east corp. line to Broadwell Road.
- Cross railroad, running between lakes in Newtown with intersection on western end of Broadwell.
- Length of connector would be about 1.6 miles.

NEEDS ADDRESSED

P11) Improve freight connections between ANCOR and SR 32/I-275 due to constraints on Mt. Carmel Rd., Round Bottom Rd. and SR 32 to support local economic development plans.

5/16 MEETING DISCUSSION AND COMMENTS

- This concept is the most advantageous for businesses located on Round Bottom Road.
- Concept would require crossing Dry Run Creek and railroad tracks.
- The majority of land and mining rights in this area are controlled by Martin Marietta.
- Martin Marietta's planned mining operation will affect traffic volumes in the area and may affect access needs and/or placement of the access road. However, Martin Marietta's plans and timing are not yet known.
- Likely no retaining walls would be needed, unlike concepts A-2 and A-3.
- No additional comments were received following the 5/16 meeting.

- This concept includes a shared-use path.
- The Committee suggested reaching out to Martin Marietta to see if there are updates regarding development plans for the area and/or potential funding opportunities for the connector.
- The Committee indicated this concept could serve as an alternative to the Round Bottom Road and SR 32 route for truck traffic.
- Forest Hills School District recently relocated its bus depot to Round Bottom Road just north of Valley Ave.
- The Committee indicated that, to be viable, the intersection at the new access road and SR 32 would need to be signalized or could be a roundabout. While the roundabout would provide a gateway to slow traffic entering Newtown, the imbalance of anticipated traffic on the access road as compared to SR 32 might cause undesired traffic delays with a roundabout.
- A question was raised about the proximity of the new access road intersection with Broadwell and the existing intersection at Broadwell and Round Bottom. Could the access road tie into the existing intersection using a roundabout? Additionally, a committee member noted that intersection improvements were needed at Broadwell and Round Bottom since it does not accommodate truck turns today. It may be possible to relocate the entrance to Evans Landscaping opposite Broadwell. Employees currently cross Round Bottom to access parking, resulting in safety concerns.
- One member of the Committee indicated that, in terms of prioritization, it would be important to start here with the SR 32 and ANCOR concepts; many of the other potential improvements in the corridor are affected by this decision.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C10 at the October Open House meetings.

Concepts A-1 (C10) and A-2 (C11) were discussed together. The following notes are also included on the A-2 (C11) summary page.

- Dry Run Creek has a flood hazard designation, which both concepts A-1 (C10) and A-2 (C11) will need to address.
- Concepts A-1 (C10) and A-2 (C11) were shared with Martin Marietta and the company will support either option. Once the mining operation begins, truck traffic will increase in the area.
- ODOT does note anticipate any significant problems with the proposed road crossing the railroad.
 - It is not optimal, however, to have an intersection near the railroad, as suggested in concept A-2 (C11), due to sight distance concerns.
 - A shared-use path along the rail line is unlikely because the railroad has the right-of-way and plans on expanding. They have already approached the Village of Newtown expressing interest in expanding operations in the Village.
- Anderson Township would like to see one of the concepts implemented sooner than later so that the infrastructure will be in place to encourage development.
- The need for this project will be largely driven by economic development in this area, and a local agency will be the most likely sponsor for the project. ODOT recommends setting the priority as medium at this time.

NEXT STEPS/RECOMMENDATION

• Include in the Implementation Plan as a medium priority for further vetting, but do not conduct any further analysis at this time.

9/5 MEETING DISCUSSION AND COMMENTS

				Traffic Operation	ons				R/W Im	pacts	Environment	al Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Result	s	Tra	ansModeler R	esults	Construction Cost	Number of	2/14/0	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$11.3M to \$16.9M	0	\$175K to \$350K	D1	Archaeology	Improves	Improves	Improves

Theme: CONNECTIVITY BETWEEN SR 32 AND ANCOR

Concept drawn with Concept A-1 (C10) on the next page.

Identifier: A-2 (C11)

DESCRIPTION

- Add access road from Newtown east corp. line to Broadwell Road.
- Stay along east side of railroad with intersection near railroad crossing on Broadwell.
- Length of connector would be about 1.5 miles.

NEEDS ADDRESSED

P11) Improve freight connections between ANCOR and SR 32/I-275 due to constraints on Mt. Carmel Rd., Round Bottom Rd. and SR 32 to support local economic development plans.

5/16 MEETING DISCUSSION AND COMMENTS

- Concept would require constructing a bridge across Dry Run Creek, but bridge would be smaller than the bridge needed in Concept A-1.
- Concept would require constructing a retaining wall along the base of the hill on the east side of the access road.
- Concept would require acquiring the commercial building adjacent to the east side of the railroad tracks (owned by Evans Landscaping), near Broadwell Road (south of the parking lot).
- No additional comments were received following the 5/16 meeting.

9/5 MEETING DISCUSSION AND COMMENTS

- This concept includes a shared-use path.
- This connector is shifted east due to the railroad line; the intersection
 of the access road and Broadwell Road is immediately adjacent to the
 rail line.
- The Committee indicated this concept could serve as an alternative to

the Round Bottom Road and SR 32 route for truck traffic.

- The Committee indicated that, to be viable, the intersection at the new access road and SR 32 would need to be signalized or could be a roundabout. While the roundabout would provide a gateway to slow traffic entering Newtown, the imbalance of anticipated traffic on the access road as compared to SR 32 might cause undesired traffic delays with a roundabout.
- A question was raised about the proximity of the new access road intersection with Broadwell and the existing intersection at Broadwell and Round Bottom. Could the access road tie into the existing intersection using a roundabout? Additionally, a committee member noted that intersection improvements were needed at Broadwell and Round Bottom since it does not accommodate truck turns today. It may be possible to relocate the entrance to Evans Landscaping opposite Broadwell.
- One member of the Committee indicated that, in terms of prioritization, it would be important to start with the SR 32 and ANCOR concepts; many of the other potential improvements in the corridor are affected by this decision.
- No additional comments were received following the 9/5 meeting.

12/10 MEETING DISCUSSION AND COMMENTS

This concept was presented as C11 at the October Open House meetings.

Concepts A-1 (C10) and A-2 (C11) were discussed together. The following notes are also included on the A-1 (C10) summary page.

- Dry Run Creek has a flood hazard designation which both concepts A-1 (C10) and A-2 (C11) will need to address.
- Concepts A-1 (C10) and A-2 (C11) were shared with Martin Marietta and the company is in favor of either option. Once the mining operation begins, truck traffic will increase in the area.
- ODOT does note anticipate any significant problems with the proposed

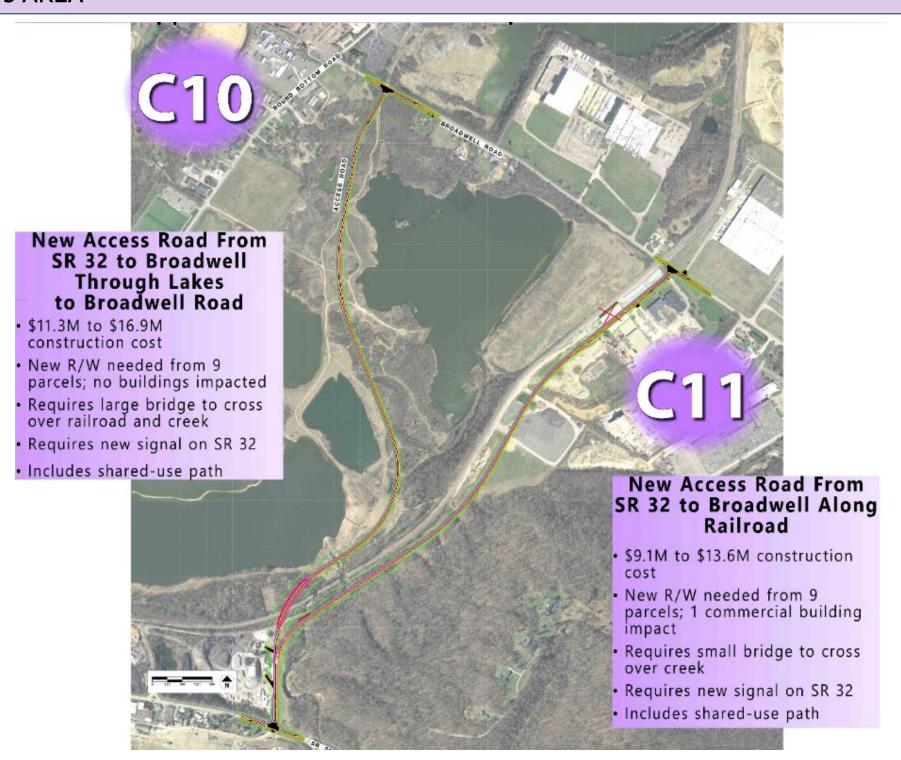
road crossing the railroad.

- It is not optimal though to have an intersection near the railroad, as suggested in concept A-2 (C11), due to sight distance concerns.
- A shared-use path along the rail line is unlikely because the railroad has the right-of-way and plans on expanding. They have already approached the Village of Newtown expressing interest in expanding operations in the Village.
- Anderson Township would like to see one of the concepts implemented sooner than later so that the infrastructure will be in place to encourage development.
- The need for this project will be largely driven by economic development in this area, and a local agency will be the most likely sponsor for the project. ODOT recommends setting the priority as medium at this time.

NEXT STEPS/RECOMMENDATION

• Include in the Implementation Plan as a medium priority for further vetting, but do not conduct any further analysis at this time.

				Traffic Operation	ons				R/W In	npacts	Environmen	tal Impacts	Support		
Safety ECAT Benefit/Cost	Time		HCS Result	S	Tra	ansModeler R	esults	Construction Cost	Number of	- 6	Anticipated	Red Flag	and/or Facilitate	Improve Regional Connectivity	Improve Local Access
Ratio	Period	2042 Delay (seconds)	2042 LOS	% Reduction from No Build	2042 Delay (seconds)	2042 LOS	% Reduction from No Build		Relocations	R/W Cost	Environmental Document	Triggers	Multi-Modal	Connectivity	
								\$9.1M to \$13.6M	1 commercial	\$725K to \$1.5M	D1	R/W, relocation, Archaeology	Improves	Improves	Improves



PUBLIC FEEDBACK RATINGS SUMMARY: C10

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
19%	11%	37%	21%	11%

(percentages have been rounded)

PUBLIC FEEDBACK RATINGS SUMMARY: C11

Strongly Oppose	Dislike	Neutral	Like	Strongly Support
14%	10%	35%	24%	17%