

TRUMAN + WINNER ROAD

INDEPENDENCE, MISSOURI

FEBRUARY 2016



ACKNOWLEDGMENTS

THANKS TO:

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Existing Conditions Images

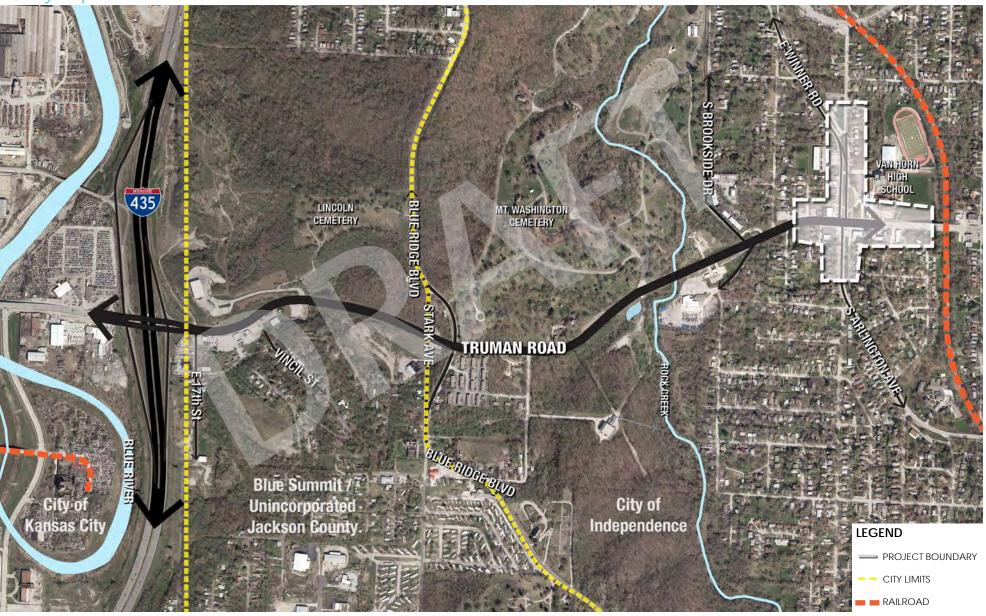
PROJECT PURPOSE

Due to the area's prominence in western Independence and its potential for redevelopment, this study was initiated by the City of Independence and Mid-America Regional Council to provide planning and pre-engineering services for the intersection of Truman Road and Winner Road in Independence. The project team explored previous recommendations developed in the Truman Road Green Gateway Development Plan, completed in 2014, to determine their technical viability and acceptance by the community and area partners.

The project team explored ways to incorporate amenities and infrastructure to support multiple transportation options, including enhanced vehicular, bus, bicycle and pedestrian transportation. Of particular importance was enhancing pedestrian connectivity and safety for Van Horn High School and the adjacent neighborhoods, as well as increasing activity throughout this commercial node.

At various points during the project, area residents, community members, and students were engaged to provide input and share their opinions specific to the project area and issues. The planning team facilitated a significant public input process in order to ensure that issues were clearly understood by the community, to solicit their input on proposed solutions, and to inform them of the final recommendations for future improvements to the area.





Approximate Study Area



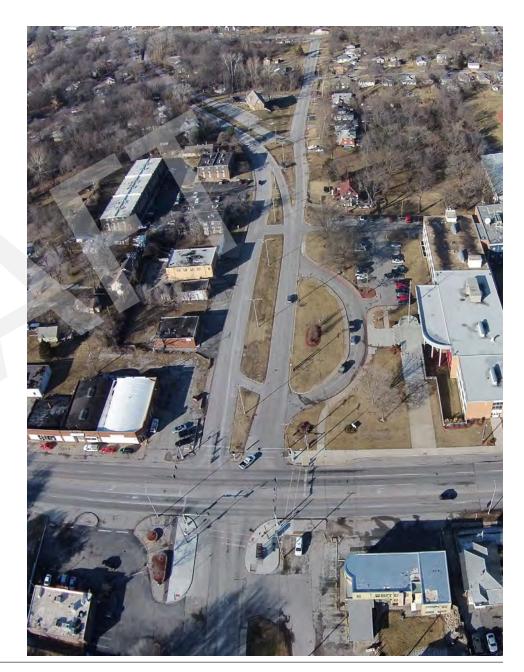
PROCESS

The Planning Team worked with the City of Independence, Mid-America Regional Council, and Independence School District on a three-part process to develop a conceptual plan for the Truman and Winner Road Intersection.

Discovery - Compiling historic background, community perspectives, and physical features of the area to understand the current conditions as they influence opportunities for the future. Evaluating vehicular and pedestrian movements on site in real time, as they relate to functionality and safety.

Concepts – Generation and thoughtful consideration of multiple ideas to determine a feasible strategy to improve and address the project needs. The best solutions are a result of an iterative design process that creates and tests many ideas.

Recommendations + Implementation - Aligning evaluated ideas and project goals with the vision of the community and area partners, and making recommendations for implementation of the proposed improvements.

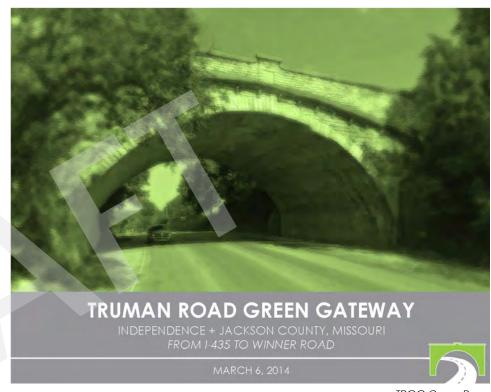






TRUMAN ROAD GREEN GATEWAY PLAN

The Truman Road Green Gateway Development Plan (TRGG) outlines a consistent, comprehensive design approach for the Truman Road corridor that promotes efficiency, safety, and functionality throughout. The plan was primarily intended to enhance transportation choices and pedestrian safety along the corridor. The plan proposes a new multi-use paved trail parallel to Truman Road to enhance the pedestrian and bicycle connectivity for area residents to nearby commercial areas, Van Horn High School, and corridor transit stops. The area immediately around the Winner Road and Truman Road intersection was identified as a priority area for future redevelopment to better serve the nearby neighborhoods, the high school, and the significant number of commuters that pass through the intersection each day.



TRGG Cover Page



TRGG Overall Land Use Plan

TRGG RECOMMENDATIONS

The concept found within the TRGG, which illustrates an 'aggressive' build-out scenario, focused on creating opportunities for new commercial development around the intersection, opposite of Van Horn High school. The plan also indicates increased single and multi-family density in the surrounding areas to further support the proposed commercial redevelopment. At this time, the City of Independence has chosen to allow the markets to dictate the type and timing of the redevelopment in this area. The decision whether or not to employ a more proactive strategy will rely on the results of the market driven approach.

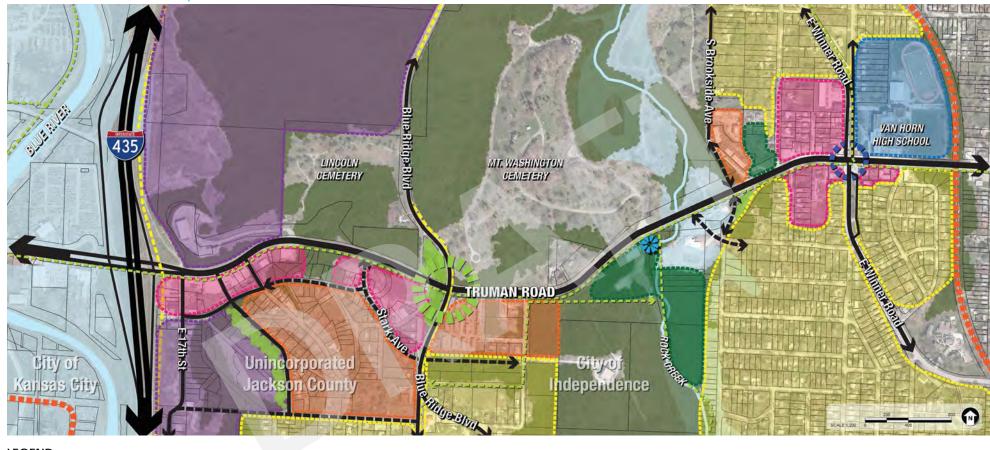
Key recommendations from 'Commercial Development Vision – Winner Road' found in the TRGG Plan:

- Consolidate Winner Road North of Truman Road and reconfigure driveway entrance(s) into Van Horn High School
- Provide opportunities for neighborhood-oriented commercial businesses catering to local residents, high school traffic, and commuter traffic with parking to support such uses.
- Provide preferred residential development types in the area per direction of the TRGG advisory committee and public meeting participants.
- Create a trail head park and trail connection to provide pedestrian and bicycle access to the proposed multi-use trail along the South side of Truman Road.
- Utilize the preferred corridor 'kit of parts' for streetscape fixture selections and/or corridor aesthetics



Commercial Development Vision - Winner Road

TRGG Corridor Redevelopment Scenario



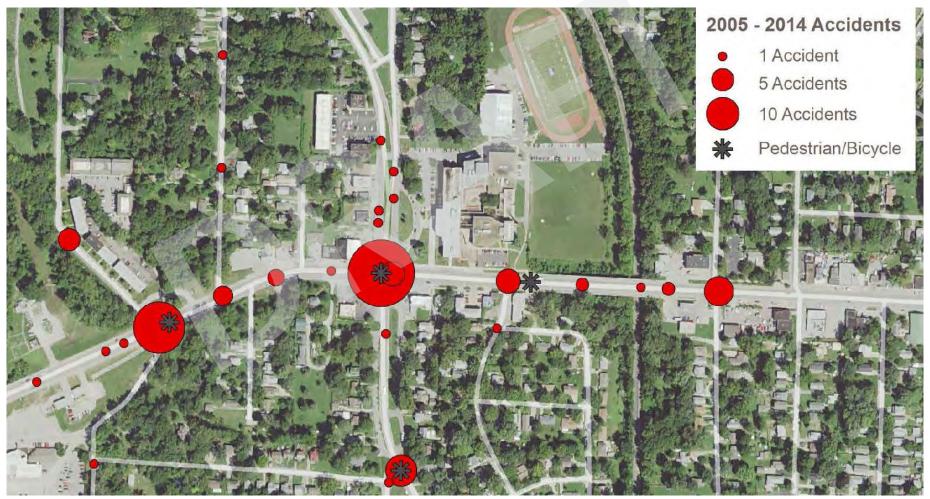
LEGEND



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SITE RECONNAISSANCE

Van Horn High School generates the largest volume of traffic in the area. At peak times, when school buses, parents, faculty, and students driving and walking through the area, a number of traffic concerns occur. In order to identify and evaluate the full extent of pedestrian and vehicular circulation issues at the intersection, the project team reviewed relevant plans and GIS information in the area, talked with students and faculty at Van Horn High School, and discussed day-to-day functionality of the intersection with community members.



Accident History



North on Winner Road / 7:00AM

Additionally, the team conducted an in-depth site reconnaissance exercise throughout the course of a full school day to observe pedestrian and vehicular movements throughout the day. Project team members were located at various location around the intersection in order to inventory traffic movements through the intersection. Specifically, they recorded student walking routes to and from school, student drop-off/pick up by parents, mass transit boardings on Winner Road, and school bus movements into and off of school property. The field reconnaissance team identified areas without sidewalks, places where vehicular and pedestrian conflicts take place, and the general functionality of the intersection. Videos were recorded along Winner Road during times of peak activity (7:00am and 2:20pm - school start and dismissal) to demonstrate these observations to the City, school district, students, and community.



South on Winner Road / 2:20PM

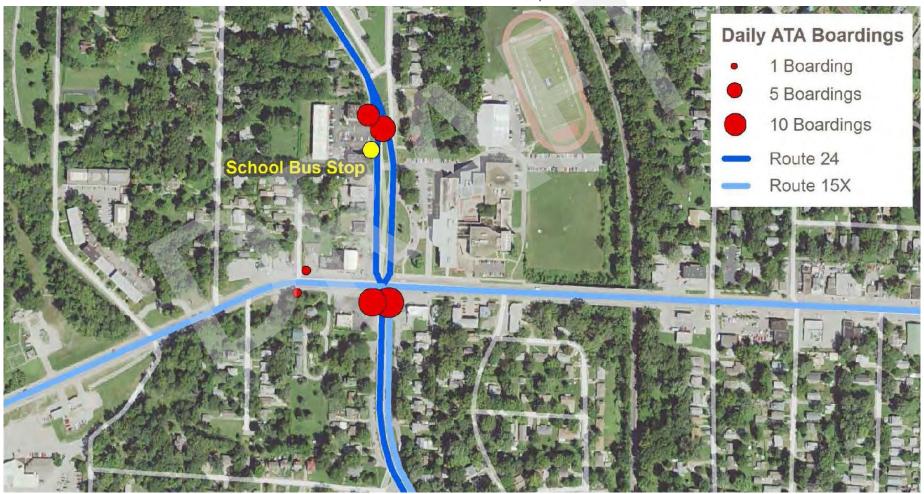


North on Winner Road / 2:25PM

MASS TRANSIT FACILITIES

Through evaluation of the existing transit facilities in the area, as well as through coordination with Kansas City Area Transit Authority (KCATA), it was determined that additional mass transit facilities in this area are not warranted. Current KCATA plans already indicate the

removal of a northbound bus stop with a shelter along Winner Road, north of Van Horn High School. This will leave one northbound stop and one southbound stop at the intersection, located on the south side of Truman Road. Based on KCATA standards, current ridership volume in the area does not warrant any infrastructure beyond a bus stop sign at this intersection. However, the City of Independence has expressed a desire for enhanced transit stops with additional amenities such as benches and shelters.

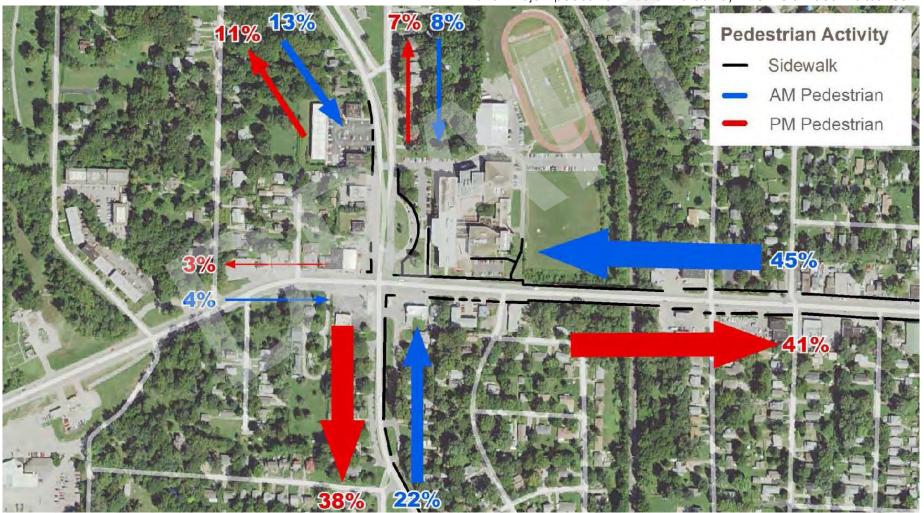


Daily Transit Boardings

SIDEWALK CONNECTIVITY

Sidewalk connectivity in the study area is lacking in many instances. Students were observed moving to and from school on undefined pedestrian paths, in ditches or in traffic lanes. This creates an

unsafe condition for pedestrians and for vehicles. Lack of sidewalks in the project area, however, is not unique to these neighborhoods. This condition exists throughout much of western Independence. For the purposes of this study, however, the team focused primarily on the area immediately around the project area and north to Highway 24 as this is a major pedestrian route noted by the field reconnaissance team.



Peak Pedestrian Activity

PAGE

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VEHICULAR + PEDESTRIAN CONFLICTS AT VAN HORN HIGH SCHOOL

Upon evaluation of the site inventory data, video recordings, and discussions with the community, it became clear that the majority of the safety/circulation issues at the intersection were caused by the interaction of students moving to and from Van Horn High School and vehicular traffic in the public right of way (both school buses and auto traffic). This being the primary transportation concern to be addressed, the concepts and recommendations in this study focus primarily on improving the safety conflicts between pedestrians and vehicles.

Through field work and research, the team was able to identify the following strengths and challenges for the intersection:

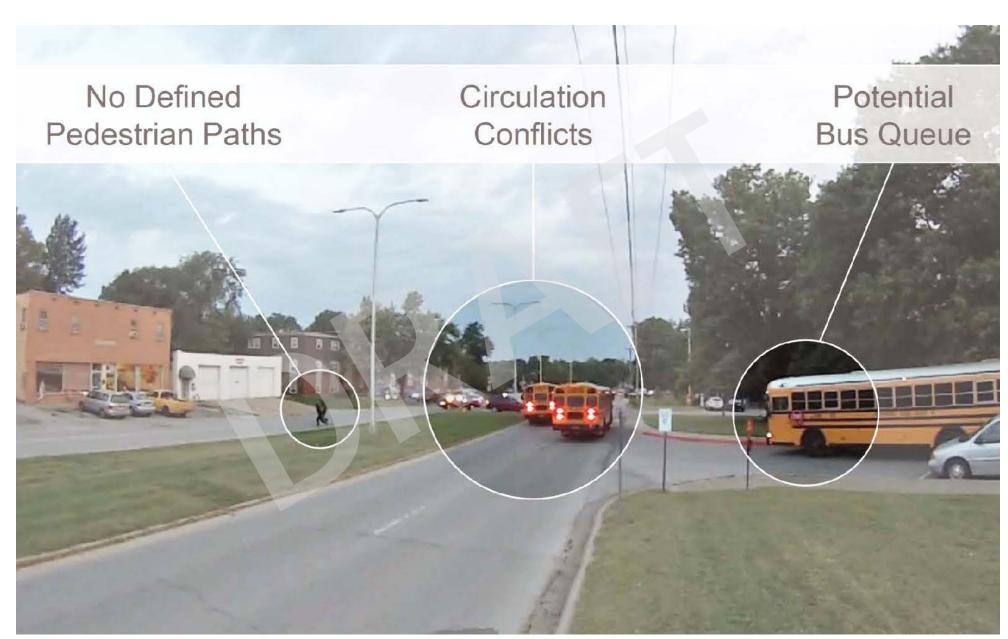
STRENGTHS

- Intersection operates well for vehicles
- Left-turn lane onto eastbound Truman Road has sufficient capacity
- Significant right-of-way on Winner Road
- Sidewalk in good condition south and east of intersection
- No significant queuing issues caused by KCATA buses

CHALLENGES

- Vehicular and pedestrian congestion at median break on Winner Road
- Student drop-off and pick-up is not contained to school property
- School buses can cause queuing issues
- Lack of sidewalk north and west of intersection
- · Accessibility and visibility issues near northern bus stop

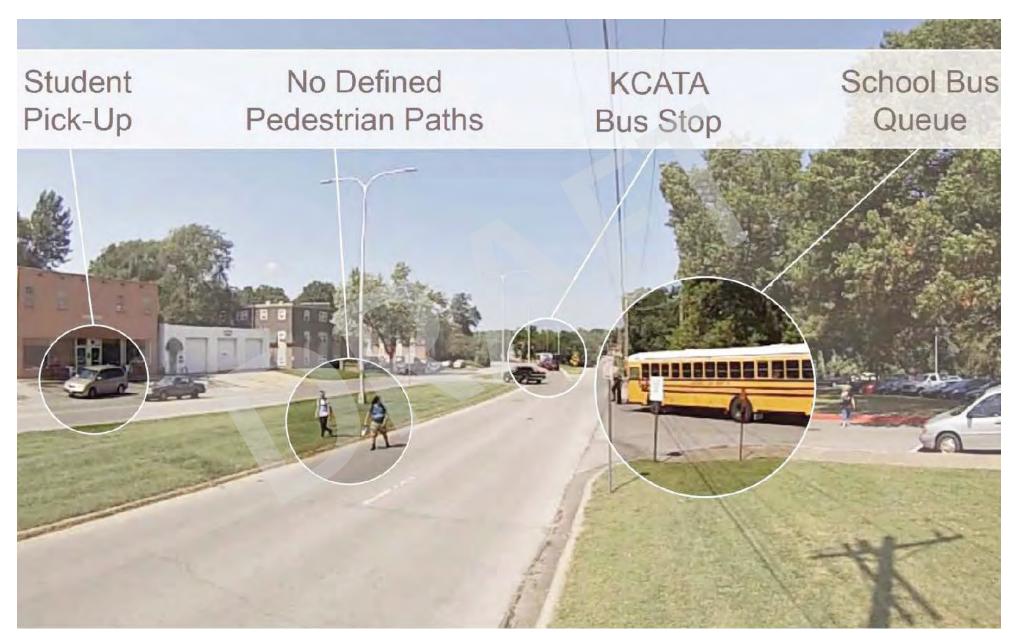




Summary of Issues - North on Winner Road / 7:00AM



Summary of Issues - South on Winner Road / 2:20PM



Summary of Issues - North on Winner Road / 2:25PM

PUBLIC OUTREACH

The City and planning team engaged the community throughout the project, intending to encourage on-going dialogue, with the ultimate goal of creating a sense of ownership and support among the members of the community. This interaction was facilitated through a variety of public outreach opportunities, which were defined and coordinated through collaboration with a number of key community leaders and City staff.

TECHNICAL ADVISORY COMMITTEE

The City of Independence appointed members of a Technical Advisory Committee to provide input and guidance throughout the project. These committee members represented organizations such as MoDOT, Independence School District, Mid-America Regional Council, KCATA, and others. This group provided input to the planning team to help guide the project and to validate that concepts were technically viable or allowable prior to being presented to the public. Additionally, this group will continue to provide assistance and guidance as the City moves toward implementation of the proposed improvements.

PUBLIC ENGAGEMENT KICK-OFF WITH COMMUNITY LEADERS

Members of the project team met with a small group of leaders from various community organizations identified by the City of Independence in order to outline a successful public outreach campaign for the project. The goal of this meeting was to identify potential groups/organizations that would be interested in the project, when and where they meet, and the preferred method for sharing information with the group. The project team discussed various outreach tools

with the group, the benefits and drawbacks of each, in order to determine the most appropriate approach for communicating project information to their constituents. Many suggestions were contributed by the group, and the project team was able to identify several organizations and events as opportunities to gain public input. Correspondence with several groups, including LINC, the Ministerial Alliance, Van Horn Student Council, and the Fairmount Community Center, was a direct result of this coordination meeting.



Public Engagement Coordination Meeting



Community Outreach Meeting with LINC



Public Open House at High School

COMMUNITY OUTREACH (VARIOUS GROUPS)

The project team met individually with small group organizations in the community to share information about the project, initial findings of the field work and research, and preliminary concepts for the project area for discussion. Based on their proximity to the study area and overall interest in the project, the following community groups hosted individual project presentations and discussions about the project:

- Van Horn Student Council
- LINC (Local Investment Commission)
- Fairmount Community Center

Reaction to the project was overwhelmingly positive in each of the community groups, and valuable input was gathered from each. Vehicular and pedestrian conflicts around the school, and the need for additional sidewalk connectivity discussion topics. were the most prevalent

PUBLIC OPEN HOUSE

A public open house for the project was hosted by Van Horn High School on December 8th, during the boy's high school basketball games, an event that was well attended by the community. Members of the planning team and City staff presented design recommendations along with the videos that highlight safety concerns observed on site. The plans were well received and thoroughly discussed by students, faculty, and community members.

WEBSITE INTEGRATION

Project information, and meeting notifications, were distributed through the City of Independence's web and social media presences, and also shared with church groups and KC LINC Caring Communities to distribute to their audiences. Updates were made at several points during the project, and a project recap with annotated site inventory videos was uploaded to the City's website per the request of the community groups.



Truman & Winner Road - Commercial Node Project

A consultant team, led by Confluence along with TranSystems, Inc.; and Hg Consult, Inc., was selected to assist the City of Independence and Mid-America Regional Council to provide planning and preliminary engineering services.

Overview:

This project is focused on the intersection of Truman Road and Winner Road in western Independence, Missouri. The project will explore recommendations previously developed in the Truman Road Green Gateway (2014). The multiple transportation options including transportation, bicycle and pedestrian amenities, and infrastructure. This traffic circulation and pedestrian movements at

Project Goals:

The project team seeks to provide the City of Independence and Mid-America Regional Council with recommendations that:

- · improve traffic circulation
- · enhance pedestrian safety
- · provide better connections to surrounding neighborhoods;
- · and increase activity at surrounding commercial areas.

Community Outreach

At various points during the project, area residents, community members, and motorists, were engaged to share their local feedback and community points-of-view specific to the project area. The team utilized public input to ensure that recommendations have been shared with the community-atlarge.

Questions and comments can be submitted electronically to: twnode@thinkconfluence.com















GOALS + DESIRED OUTCOMES

Based on the findings from the field work, research, and community input, the following prioritized recommendations were identified for the area.

• Improve safety (pedestrian and vehicular)

Vehicle and pedestrian conflicts around Van Horn High School were the primary safety concern observed in the area. Peak pedestrian and vehicular movements coincide with the start and end of the school day - when cars, buses, and students interact in many locations. Eliminating as many of these conflicts as possible became a primary goal of this study.

· Improve connectivity

Sidewalk connectivity is another major issue observed on site. Pedestrians moving through the area, in many cases, are forced to walk in the street, in grass medians, or across private property. The addition of defined pedestrian paths throughout is key to improving circulation in the area, which will allow pedestrians to safely move around the intersection as well as to and from nearby neighborhoods.

• Enhance this intersection and position it for transit supportive commercial revitalization

As illustrated in the Truman Road Green Gateway report, redevelopment around the intersection has the potential to attract neighborhood and transit-oriented commercial development. Intersection improvements that improve safety and connectivity to local neighborhoods will bolster support for these businesses - which will ultimately cater to local residents, high school traffic, and commuter traffic. Future redevelopment would likely increase transit

ridership numbers at this hub, increasing the potential for new or improved mass transit facilities.

• A revitalized commercial district at this intersection, coupled with the strong support for Van Horn High School would further reinforce enhanced vibrancy in the surrounding neighborhoods.

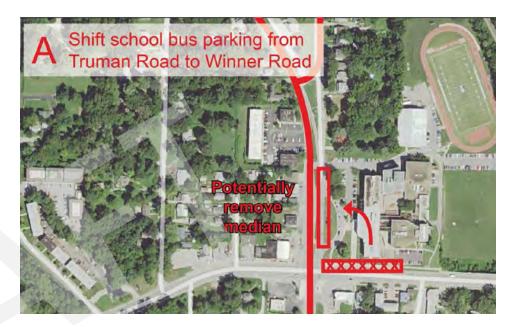


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WINNER ROAD + INTERSECTION IMPROVEMENTS

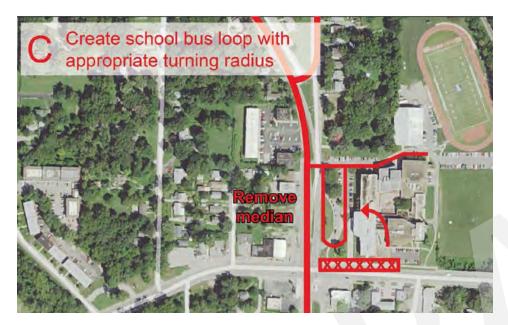
Based on the framework outlined in the Truman Road Green Gateway report, each concept proposes removing the existing median on Winner Road north of the intersection. This median is a major cause of the circulation issues at the intersection.

During peak activity hours, cars were seen parking in the median for student drop-off and pick-up. When buses move onto and off of school property, the median causes congestion and confusion for both motorists and pedestrians. The width of the grass median also encourages pedestrians to cross Winner Road north of the intersection by creating a place refuge between northbound and southbound traffic.





Circulation Modification Concepts





Circulation Modification Concepts

VAN HORN HIGH SCHOOL OPERATIONAL CHANGES

Several concepts were studied to address the safety concerns at the intersection, which focus primarily on separating school buses and students from vehicular traffic on Truman Road. The bus drop-off currently located on the north side of Truman Road is particularly problematic, as students were observed crossing between parked buses across Truman Road to awaiting parents parked on the south side of the road.

Coordination with the Independence School District and Van Horn High School administration was essential in determining the operational impacts of any proposed modifications. Meetings with school representatives were conducted in order to better understand how improvements in the right of way coincide with current operations and future plans for school property.



RECOMMENDED CONCEPT

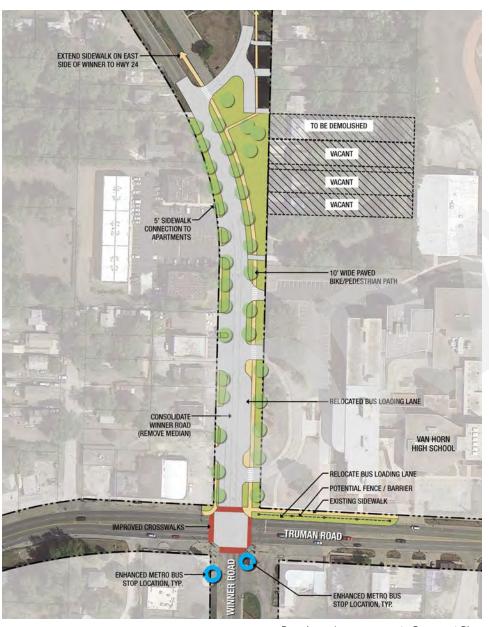
The final recommendations of this study focus on modifications within the right-of-way that improve vehicular and pedestrian safety around the intersection, increase connectivity to nearby neighborhoods, and position the area for future commercial revitalization.

NEIGHBORHOOD CONNECTIVITY

A neighborhood connectivity diagram identifies potential sidewalk connections to adjacent neighborhoods. Many neighborhoods in this area are devoid of defined pedestrian paths, which causes an unsafe environment for pedestrians. This plan shows a continuation of the 10' wide paved bike/pedestrian path, previously proposed on the south side of Truman Road in the TRGG report, to the north along the east side of Winner road. It shows a proposed sidewalk connection on the west side of Winner Road from the intersection of Truman Road to Winner Place Apartments as a part of this project, as well as several potential connections throughout the adjacent neighborhoods.



Neighborhood Connectivity Diagram



Roadway Improvements Concept Plan

ROADWAY IMPROVEMENTS

Removing the median from Winner Road greatly improves vehicular and pedestrian safety and frees up space within the right of way for green space or other pedestrian improvements. This allows space for a 10' wide bike/pedestrian path on the east side, 5' wide sidewalk connection on the west, and additional greenspace on both sides.

The bus loading lane is relocated from its current location on the north side of Truman Road to the east side of Winner Road in front of the school. An ornamental fence or other type of barrier is shown in this location, south of the school, to discourage students from crossing Truman Road away from the intersection.



TIE FUTURE DRIVE INTO

EXISTING BUS DROP-OFF

-TRUMAN ROAD

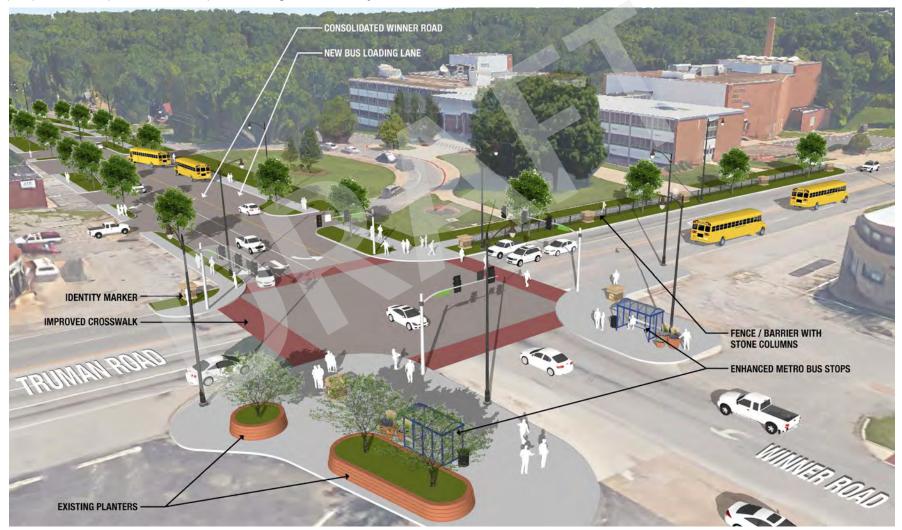
- ENTRANCE TO SCHOOL RELOCATED NORTH (AWAY FROM INTERSECTION)
- MINIMAL SCHOOL OPERATIONAL CHANGES
- NEED FOR EASEMENTS

SCALE-17-67 J.J.J. Alternate Driveway Plan

INTERSECTION IMPROVEMENTS

Recommendations for enhanced pedestrian facilities at the intersection are also included in this concept, as illustrated in the enlargement plan and perspective. Proposed streetscape furnishings and identity marker

concept designs, selected during the public involvement portion of the TRGG report, are carried forth in this concept. Improved crosswalks and enhanced metro bus stops are also indicated, per the preference of City staff, with an additional shelter, benches, litter receptacles and planters.



Intersection Improvement Concept











Kit of Parts



Intersection Improvements Plan

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CONCEPTUAL COST ESTIMATE

TRUI	TRUMAN ROAD + WINNER ROAD INTERSECTION				
	ITEM	QTY	UNIT	UNIT COST \$	COST \$
1	Mobilization	1	LS	\$80,000.00	\$80,000
2	Demolition and Removals	1	LS	\$32,125.00	\$32,125
3	Remove and Reset Signs	19	EA	\$100.00	\$1,900
4	Earthwork	1	LS	\$20,000.00	\$20,000
5	Seeding	1.12	AC	\$1,500.00	\$1,680
6	Erosion Control	1	LS	\$5,000.00	\$5,000
7	Type 3-01 Asphaltic Concrete Surface (2")	600	TON	\$110.00	\$66,000
8	Type 1-01R Asphaltic Base (12")	3600	TON	\$95.00	\$342,000
9	4" Concrete Sidewalk	1300	SY	\$45.00	\$58,500
10	Sidewalk Ramp (6" Concrete)	10	EA	\$2,000.00	\$20,000
11	Curb and Gutter Type B	1950	LF	\$32.00	\$62,400
12	Entrances (8" Concrete)	170	SY	\$90.00	\$15,300
13	Refurbished Bus Shelter w/ Bench	2	EA	\$15,000.00	\$30,000
14	Pavement Markings	1	LS	\$9,000.00	\$9,000
15	Permanent Signing	1	LS	\$5,000.00	\$5,000
16	Pedestrian Head and Pushbutton	3	EA	\$1,100.00	\$3,300
17	Signal Modifications	1	LS	\$150,000.00	\$150,000
18	Fence (Faux Wrought Iron) (4'-0")	320	LF	\$85.00	\$27,200
19	Adjust Storm Structure at Intersection	1	LS	\$12,000.00	\$12,000
20	Traffic Control	1	LS	\$25,000.00	\$25,000
21	Storm Drainage Structures	1	LS	\$40,000.00	\$40,000
22	Storm Drainage Pipes	1	LS	\$111,500.00	\$111,500
23	Landscaping	1	LS	\$60,000.00	\$60,000
24	Lighting	1	LS	\$50,000.00	\$50,000
25	Site Furnishings	1	LS	\$18,000.00	\$18,000
26	Monuments and Signage	1	LS	\$87,000.00	\$87,000
				Subtotal:	\$1,332,905
	Contingency			20%	\$266,581
				Construction Subtotal:	\$1,599,486
	Fees (A/E + Surveying)			15%	\$239,923
				Total Cost:	\$1,839,409

BUS	BUS PULL-OFF ON TRUMAN ROAD (DEDUCT)					
	ITEM	QTY	UNIT	UNIT COST \$	COST \$	
1	Bus Pull-off on Truman Road	1	LS	\$35,000.00	\$35,000	
	Contingency (Deduct)			20%	\$7,000	
				Construction Subtotal:	\$42,000	
	Fees (A/E + Surveying) (Deduct)			15%	\$6,300	
				Total Cost:	\$48,300	
				New Project Total:	\$1,791,109	

- 1. Cost estimate does not include cost for Right-of-Way Acquisition or Easements.
 2. Minor utility relocations assumed, moved as a part of utility's license agreement with the City.
- 3. Storm drainage assumed to be in separate system, with capacity in the existing system to accommodate design flows.
- 4. Bus shelters are assumed to be provided by KCATA.
- 5. Cost estimate does not include provisions for future maintenance, including bus shelters.6. Cost estimate does not include MARC Fees, or City Administration costs.

The consultant, using his or her professional judgment, has developed this stated Opinion of Probable Construction Cost based upon the design status identified above. Development of this Opinion has included consideration of design input level; however, the circumstances under which the work is expected to be undertaken, the cost and availability of materials, labor and services, probable bidder response and the economic conditions at the time of bid solicitation are beyond the control of the consultant and will impact actual bid costs. Should bidding be delayed, these costs should be reviewed and, if necessary, adjusted to a more applicable Engineering News Record Construction Cost index.

ALTE	ALTERNATIVE HIGH SCHOOL DRIVEWAY CONFIGURATION					
	ITEM	QTY	UNIT	UNIT COST \$	COST \$	
1	Mobilization	1	LS	IN BASE BID	IN BASE BID	
2	Demolition and Removals	1	LS	\$15,000.00	\$15,000	
3	Remove and Reset Signs	4	EA	\$100.00	\$400	
4	Earthwork	1	LS	\$8,000.00	\$8,000	
5	Seeding	0.2	AC	\$1,500.00	\$300	
6	Erosion Control	1	LS	\$1,500.00	\$1,500	
7	Type 3-01 Asphaltic Concrete Surface (2")	125	TON	\$110.00	\$13,750	
8	Type 1-01R Asphaltic Base (12")	750	TON	\$95.00	\$71,250	
9	4" Concrete Sidewalk	20	SY	\$45.00	\$900	
10	Sidewalk Ramp (6" Concrete)	20	SY	\$45.00	\$900	
11	Curb and Gutter Type B	520	LF	\$32.00	\$16,640	
12	Pavement Markings	1	LS	\$1,500.00	\$1,500	
13	Permanent Signing	1	LS	\$800.00	\$800	
14	Traffic Control	1	LS	\$3,000.00	\$3,000	
15	Storm Drainage Structures	1	LS	\$10,000.00	\$10,000	
16	Storm Drainage Pipes	1	LS	\$6,000.00	\$6,000	
				Subtotal:	\$149,940	
	Contingency			20%	\$29,988	
				Construction Subtotal (Rounded):	\$180,000	
	Fees (A/E + Surveying)			15%	\$27,000	
				Total Cost:	\$207,000	

NOTES & ASSUMPTIONS:

- 1. Cost estimate does not include cost for Right-of-Way Acquisition or Easements.
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NEXT STEPS

Through coordination with City staff and City leadership, funding will be sought through state and federal entities, as well as other local funding mechanisms, to implement various elements of the plan. All implementation measures will be closely coordinated with Van Horn High School and adjacent property owners.

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