

Kasold Drive Improvement Project



Recommendations by

**Sustainability
Action
Network**



Local Solutions
for Transition to
a Sustainable
Economy

Bicycle transportation advocacy since 2007

Kasold Drive Improvement Project



Lawrence Complete Streets Policy – key points

- **Complete Streets are designed to serve everyone:** pedestrians, bicyclists, transit riders, and motorists.
- **Every street project** should incorporate Complete Streets Elements as feasibility and funding allows.
- **Fiscal responsibility** should be used when considering Complete Streets Elements.

Adopted by City Commission, 27 March 2012

Kasold Drive Concept Study

Comparative Cost/Benefit Analysis:

Option 1: Complete Street

Option 2: Incomplete Street

Evaluation Criteria	Option 1	Option 2
Traffic	Improved Level of Service Rating	Improved Level of Service Rating
	Improved Capacity at Intersections	Improved Capacity at Intersections
	Reduced Congestion	No Reduction in Congestion
	Reduced Vehicle Speed	Higher Vehicle Speeds
	No Lane Shifting with Median	
Safety	Increased Safety	No Change in Safety
	Decrease in Vehicle Collisions	Wider Bike Lanes
	Wider Bike Lanes	

Evaluation Criteria	Option 1	Option 2
Non-Motorized Travel	Wider Bike Lanes	Wider Bike Lanes
	Median Provides Refuge	Shared Use Paths Encourage Bike and Pedestrian Travel
	Shared Use Paths Encourage Bike and Pedestrian Travel	
Cost Benefit	Lowest Construction Cost	Highest Construction Cost
	Federal Aid Funding Available for Round-a-bout at Harvard	Additional Maintenance Costs Required for Signal at Harvard
	No Additional Maintenance Costs Required for Round-a-bout at Harvard	Likelihood of Required Easement and R-O-W Purchases

Kasold Drive Concept Study

Comparative Cost/Benefit Analysis

Complete Street – 3 lane:

- Costs less by \$1.16 million (fiscally responsible)
- Public safety improved by buffered bicycle lanes
- Public safety improved by shorter pedestrian crossings
- Public safety improved by moderate speeds
- Convenient continuous traffic flow at roundabout

Incomplete Street – 4 lane:

- Excessive speeds of 45-55 mph, like south of 15th St.
- Public safety not possible by 24/7 policing
- Higher collision rate mid-block and at traffic signal
- Dis-incentive for people who walk or bicycle
- Year-after-year operational cost for traffic signal

Right-Sizing Roads

4 lanes to 2 lanes + center turn lane

To Better Serve the Full Range of Users



Smoother motor vehicle speeds
Major drop in collisions and injuries

Safer walking distance to median
Safer for family bicycling

Right-Sizing Roads

4 lanes to 2 lanes + center turn lane

Decades of Data: Motorist Capacity Improved

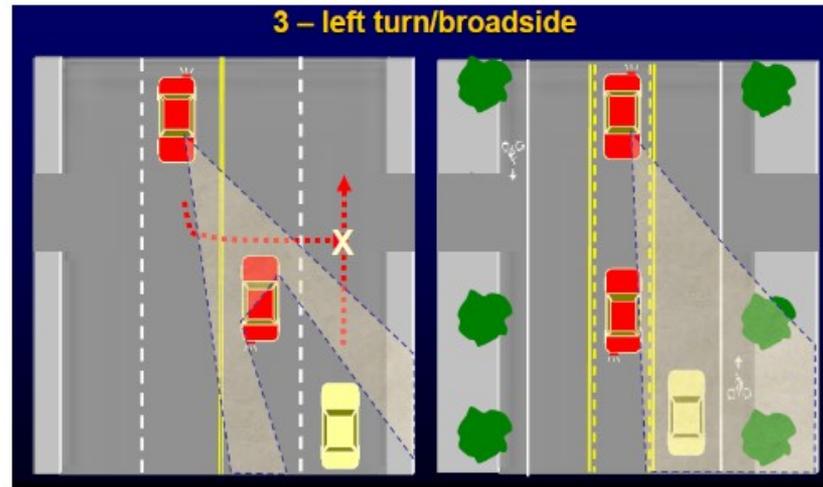
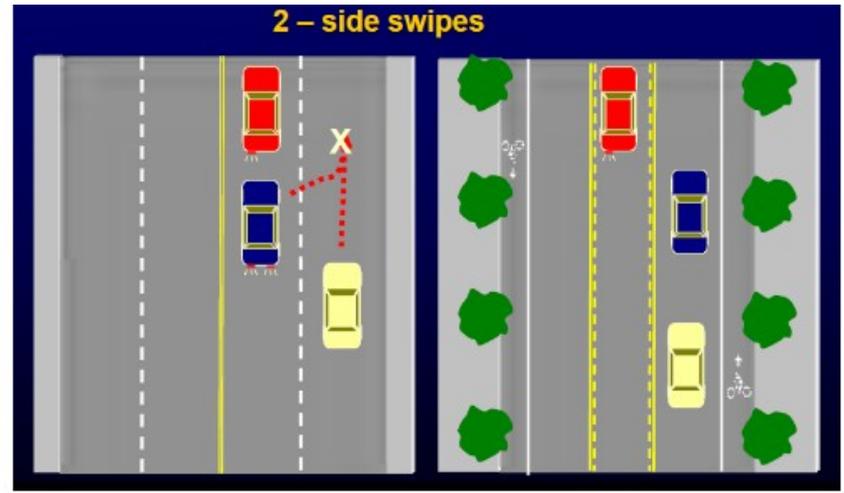
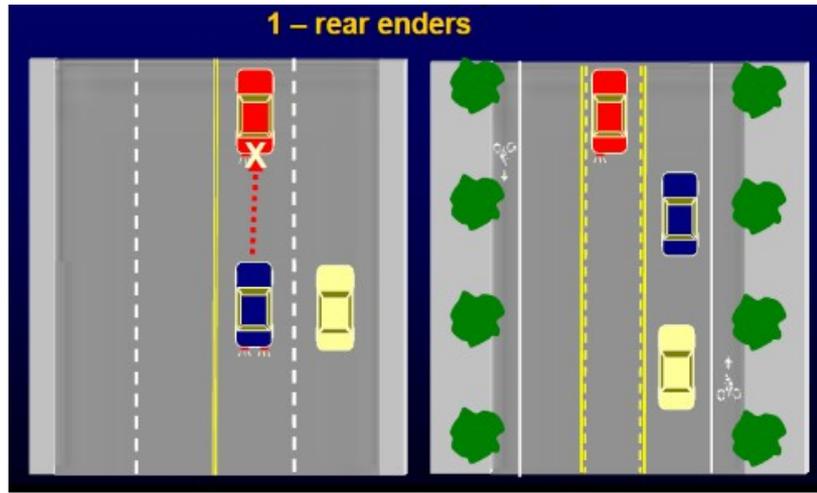
Lane Reductions of Select Street Conversions-- Volume Changes				
Roadway Section	Change	ADT (Before)	(After)	Notes
1. Lake Washington Blvd., Kirkland, Washington South of 83	4 lanes to 2 + TWLTL + bike lanes	23,000	25,913	
2. Lake Washington Blvd, Kirkland, Washington Near downtown	4 lanes to 2+ TWLTL + bike lanes	11,000	12,610	TWLTL = Two Way Left Turn Lane
3. Electric Avenue, Lewistown, Pennsylvania	4 lanes to 2 + TWLTL + bike lanes	13,000	14,500	
4. Burcham Road, East Lansing, Michigan	4 lanes to 2 + TWLTL + bike lanes	11-14,000	11-14,000	
5. Grand River Boulevard, East Lansing, Michigan	4 lanes to 2 + TWLTL + bike lanes	23,000	23,000	
6. St. George Street, Toronto, Ontario, Canada	4 lanes to 2 + bike lanes + wide sidewalks	15,000	15,000	

Dan Burden, Walkable Communities Inc. - Road Diets: Fixing the Big Roads

Right-Sizing Roads

4 lanes to 2 lanes + center turn lane

Motorists' Safety Enhanced: Collisions Avoided



This was the stated reason for rebuilding Iowa Street from Yale-15th

Right-Sizing Roads

4 lanes to 2 lanes + center turn lane

Bicyclists' Safety Enhanced: Collisions Avoided

- 85% of motorists now speed 8 mph over the limit on 4-lane Kasold north of 15th St. (Sept. 2015 data)
- An improved roadway will see 45-55 mph speeds, like now occur south of 15th Street
- Unprotected bicycle lanes are dangerous on such a 4-lane incomplete street
- The 3-lane complete street will have wider bicycle lanes with a 3 foot buffer (Sustainability Action recommends lane delineators be added)
- Bicycle encouragement means building safe facilities the whole family uses (not just water bill inserts)

Right-Sizing Roads

4 lanes to 2 lanes + center turn lane

Bicyclists' Safety Enhanced: Collisions Avoided

Incomplete Street

Complete Street

Exposed Bicycle Lanes

Buffered Bicycle Lanes



Right-Sizing Roads

4 lanes to 2 lanes + center turn lane

Harvard Roundabout Makes the 2-lanes Work

- Smooth flowing corridor dependent on non-stop Harvard intersection
- Incomplete street without roundabout
- Roundabout capacity is 1250 V/HR
- Current capacity is only 650 V/HR
- Projected total for street is 690 V/HR

Emergency Vehicles & Roundabout

- Fire Chief Bradford sees no delays
- Largest quint can negotiate it fine
- 2-lane roadway cross section accommodates a stalled vehicle fine
- He prefers center turn lane to median

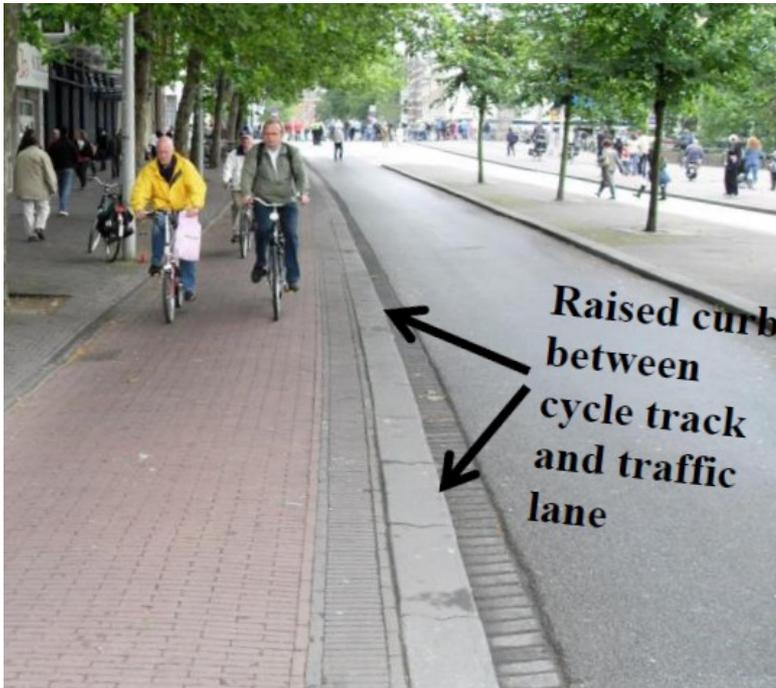


Protected Bicycle Track

Separated from motorists and pedestrians

“Keen but Cautious” Cyclists want Protection

NOT a shared use side path that has conflicts with pedestrians, dog walkers, strollers, toddlers, etc.



Protected Bicycle Track

Can Cost Less on New Arterial Construction

Cost Savings Can be Realized Two Ways:

- 1) Vehicle barrier can double as stormwater infiltration raingarden
- 2) Bicycle pavement can be 6" thick instead of 12" in street

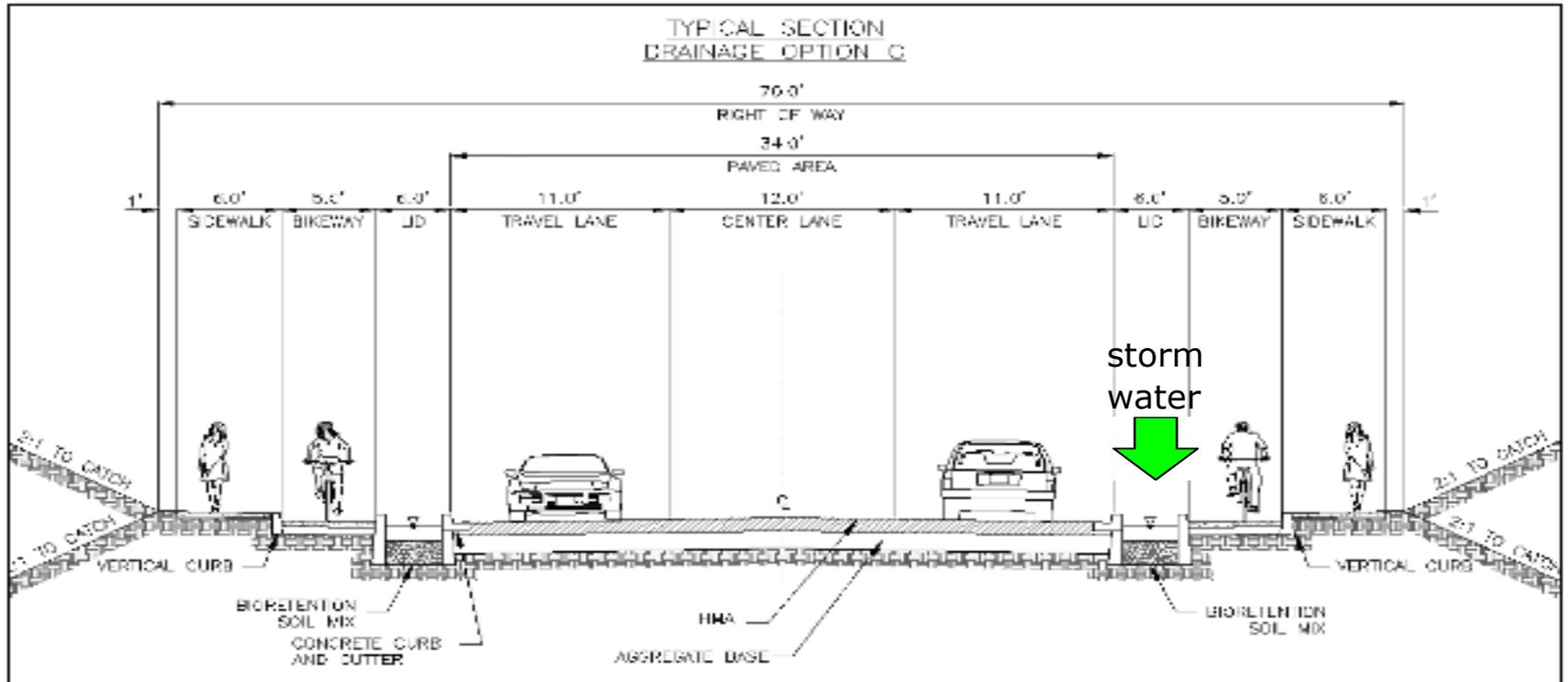


Image: MacKay Spósito. People For Bikes

Kasold Drive Complete Street



Due Diligence has been Exercised:

- 1) Community will was long ago established:** For two years, discussions with civic leaders and citizens fully vetted the Lawrence Complete Streets Policy. The City Commission committed to following that Policy on 27 March 2012
- 2) City Commission core goals:** The goals of Fiscal Responsibility, Public Safety, and Non-Motorized Transportation are fulfilled by the Kasold Drive complete street design.
- 3) Project analysis and design is extensive:** CFS Engineers has done one of the most thorough and fact-based studies ever.
- 4) The course of action is clear:** Only compelling reasoning would warrant discarding all these efforts. Lawrence does not do traffic management by straw poll. Hopefully, Commissioners will do what's right, not what's politically expedient.

Kasold Drive Complete Street



Recommendations by Sustainability Action:

Construct the Complete Street approach, with the following:

- 1) Two motorist travel lanes, 12' wide by 12" thick
- 2) One center turn lane, with several small median islands
- 3) One two-way bicycle track on east side, 12' wide by 6" thick
- 4) Separate motor lane from cycle track with 3' wide rain garden
- 5) Two 6' wide sidewalks, one each side
- 6) Separate sidewalk from cycle track with 6' median
- 7) One roundabout at Harvard Ave.
- 8) Consider roundabout at 8th St.

If you need a sign to tell people to slow down...



STRONG
TOWNS

www.StrongTowns.org

...you designed your street wrong.

Thank you
very much



Michael Almon

**Sustainability
Action
Network**
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Local Solutions
for Transition to
a Sustainable
Economy

Bobbie Walthall

To: Charles Soules
Subject: RE: streets and intersections

Begin forwarded message:

From: David Lawhorn <dlawhorn@sunflower.com>
Date: August 2, 2016 at 1:54:14 PM CDT
To: <Csoules@lawrenceks.org>
Subject: streets and intersections

Charles Soules
Director of Public Works

Please share this email with the city commission as discussed.

Mr. Soules,

Thank you for meeting with me last week to discuss the 9th street closure and the plans for the intersections on Wakarusa and especially plans for the Kasold intersection which affects all of us Lawrence citizens who live west of Iowa.

As we discussed, I have met with neighbors and numerous friends living in West Lawrence who are very concerned about the proposal to shut Kasold down to one lane. No one is in favor of that option or placing a roundabout instead of a light. Kasold is a major north south street and cannot be allowed to have the traffic flow reduced. Placing turn lanes, keeping all 4 lanes of north south open, and placing a traffic light is the only acceptable option.

It is time for the city managers and especially the city council to use some logic and NOT go against the wishes of the residents of West Lawrence. We do not want any more roundabouts.

The theoretical information presented about resulting in reduced accidents needs to be justified with facts such as exactly how many accidents really occur at those 2 locations per year now with only stop signs. I travel on Kasold and Wakarusa almost daily and over the last 21 years I can only remember seeing 2 accidents at each with thousands of vehicles using those streets daily, which does not justify a roundabout. The facts not theory needs to be considered as well as our wishes as residents of West Lawrence who use these streets every day. If the city commissioners are afraid to make the responsible decision for Lawrence then we suggest they place the issue of the Kasold and Wakarusa intersections up to a vote by the people.

Lastly we do not want to be forced into other actions by an ill-advised decision by the commission as we also discussed.

Thank you again for meeting with me and let us hope the commission recognizes the opinions of those of us who live out west.

Sincerely
Charlton David Lawhorn

Bobbie Walthall

To: Charles Soules
Subject: RE: Proposed Kasold changes.

From: John English [<mailto:haudios@sunflower.com>]
Sent: Wednesday, July 27, 2016 10:48 AM
To: Charles Soules; aaa aaa
Subject: Proposed Kasold changes.

Mr. Soules, Lawrence City Commission,

Attached is the photo we discussed showing what happens when Kasold is cut down to one lane in each direction. I count 96 cars backed up, NOT ONE BICYCLE anywhere. Although this is not the exact area being discussed, all that traffic would still have to go through the funnel. This was shot in July, when KU students are gone for the summer.

I think northwest Lawrence residents will use Kasold to connect with the new trafficway for Johnson County trips, increasing the traffic count. I know I will, even when the little connector is closed.

Kasold is one of the few streets in Lawrence that works. As a wise man once said, "If it ain't broke, don't fix it".

John English
503 Boulder St.
Lawrence, KS 66049
785-331-6331
haudios@sunflower.com

