

STH 164 / 59 Les Paul Parkway Pedestrian Tunnel Evaluation

Located 1500 Feet North of E. Sunset Drive

Structure No. C-67-46-88

July 2016

Purpose of Study

The Les Paul pedestrian tunnel was installed in mid 1980's when the Les Paul (STH 164 / 59) roadway corridor was rebuilt. Over the past 30 years, the tunnel has weathered, settled and has deteriorated.

The purpose of this study was to evaluate the existing condition of the tunnel and determine its current level of use. The final outcome of the study is to determine if the level of use supports revitalization or decommissioning of the tunnel.

The City of Waukesha Department of Public Works has assembled a task force to study the tunnel. The task force met on September 17, 2014 and November 19, 2014. The task force consisted of the following persons:

- Katie Jelacic, PE from City of Waukesha
- Mike Grulke, PE from City of Waukesha
- Glen Norder from the Waukesha School District
- Pat Grulke from City Parks & Recreation
- Chris Squires from the Wisconsin DOT
- Dan Baumann from City of Waukesha Police Department

Location of the Tunnel
(see attached map)

Review of Pedestrian Usage

The task force members wanted to quantify the volume of pedestrian users of the tunnel. Two traffic counts were completed to determine the average pedestrian users per day.

For the first count, Christ Squires from WisDOT set up an electronic counting device that registers as someone passes the device for one week during the school year. The location of the device was mounted at the top of the staircase on the east side of the tunnel and would only count when individuals came up or down the staircase. Bicyclists also use the tunnel but they were not counted since they would have used the ramp thus not crossing the counter.

The data reported from the electronic device showed an average weekday use of 0-4 pedestrians per hour from 8:00 am to 10:00 p.m. There was a peak period from 3:00

pm to 6:00 pm that averaged 25 total pedestrians during that 3 hour period. The average weekend use was a total of 10-20 pedestrians during the mid day hours.

Because of where there electronic device was placed it could have been subject to false readings.

The second count was a visual count from 3:00 p.m. to 4:00 p.m by a City staff member on Thursday June 4, 2015. This count was to verify who was using the tunnel during the peak weekday period. Only one pedestrian was observed using the tunnel from 3:15 to 3:45 pm. During the same time period, 2 pedestrians were seen crossing Les Paul Parkway at the traffic signal at Sunset Drive.

Evaluation of Existing Condition of the Tunnel

The City of Waukesha did a condition evaluation of the tunnel from the perspective of what it would take to bring it up to a refurbished and more inviting condition for users.

The following is a list of items that would need to be fixed:

- Remove all overgrown weeds on ramp and staircase
- Major clean up and power wash the tunnel floor
- Sand blast and repaint all concrete surfaces / graffiti proof paint
- Replace the concrete stairs
- Replace concrete walk at bottom of stairs
- Sandblast and repaint rusted railings on the ramp
- Repair and caulk a joint on the ramp wall near southwest corner
- Replace railing on both sides of concrete stairs
- Fix the fencing around the ramp and stairs (fence is leaning)
- Paint the chain-link fence ... few locations with rust
- Replace and rewire all the tunnel light fixtures (10 each)
- Replace the light poles fixtures with new ones directed to the tunnel entrance
- Install a new light pole on west side to provide light into tunnel entrance
- Install video camera monitoring (with light) ... route back to Heyer School
- Drainage grate on east side of tunnel plugged possible major replacement of drainage piping or rooting the line.
- Drainage grate on west side of tunnel plugged possible major replacement of drainage piping or rooting the line.
- Tunnel floor is displaced on west the side. Possible structural issue. Structural person from DOT and the City should review how to fix.

- Noticed that southbound Les Paul Pkwy pavement is noticeably distressed and cracked directly above the disjointed sections of the tunnel. This may be an issue of the tunnel sinking and causing the structural fill of the road to sink.
- Major water ponding issues on west side cause by an entire section of tunnel sinking and water not draining out.
- If displaced tunnel (sunk) section can remain, then trip hazard cause by displacement will need to be filled in to create smooth tunnel floor.
- Overgrown trees and grass on west side of tunnel needs to be trimmed down
- Reset existing stone wall on west side of tunnel
- Resurface 250 feet of asphalt path on west side
- Replace 100 feet of concrete sidewalk / path on west side of tunnel (very broken slabs)

If the decision is made that the tunnel should be maintained for use, then a quick "fix and clean up" could be done in 2015 in anticipation for a more in-depth repair and upgrade in 2016. However, some of the conditions, such as broken concrete steps, would need immediate fixing. City crews can block off the staircase and have pedestrians just use the ramp.

Maintenance Agreement Review

WisDOT and the City entered into an agreement regarding this Pedestrian Tunnel in 1987 during the WisDOT's reconstruction project of S.T.H 59 between Sunset Drive and Racine Ave. See the attached agreement.

Review of WisDOT Need for Tunnel

The DOT did not express an opinion if the tunnel should remain open or close. If it remains open the City would continue to maintain the tunnel.

Review of School District Need for Tunnel

The school district has approximately 3 to 5 families that "sometimes" use the tunnel. The students that attend Heyer Elementary are serviced by School Bus #32. As long as the students from south of Les Paul Parkway have the bus that is already financed by the district, they do not see any reason to keep the tunnel open. (Per email from Todd Grey dated June 12, 2105)

Review of City Parks & Recreation Need for the Tunnel

The Park Rec Staff feels that if there is an alternate safe option to cross Les Paul Parkway then the tunnel could be removed. The pedestrians can cross at the intersection of Sunset and Les Paul.

Conclusion on What to do with the Tunnel

It is the conclusion of the committee that the tunnel should be closed.

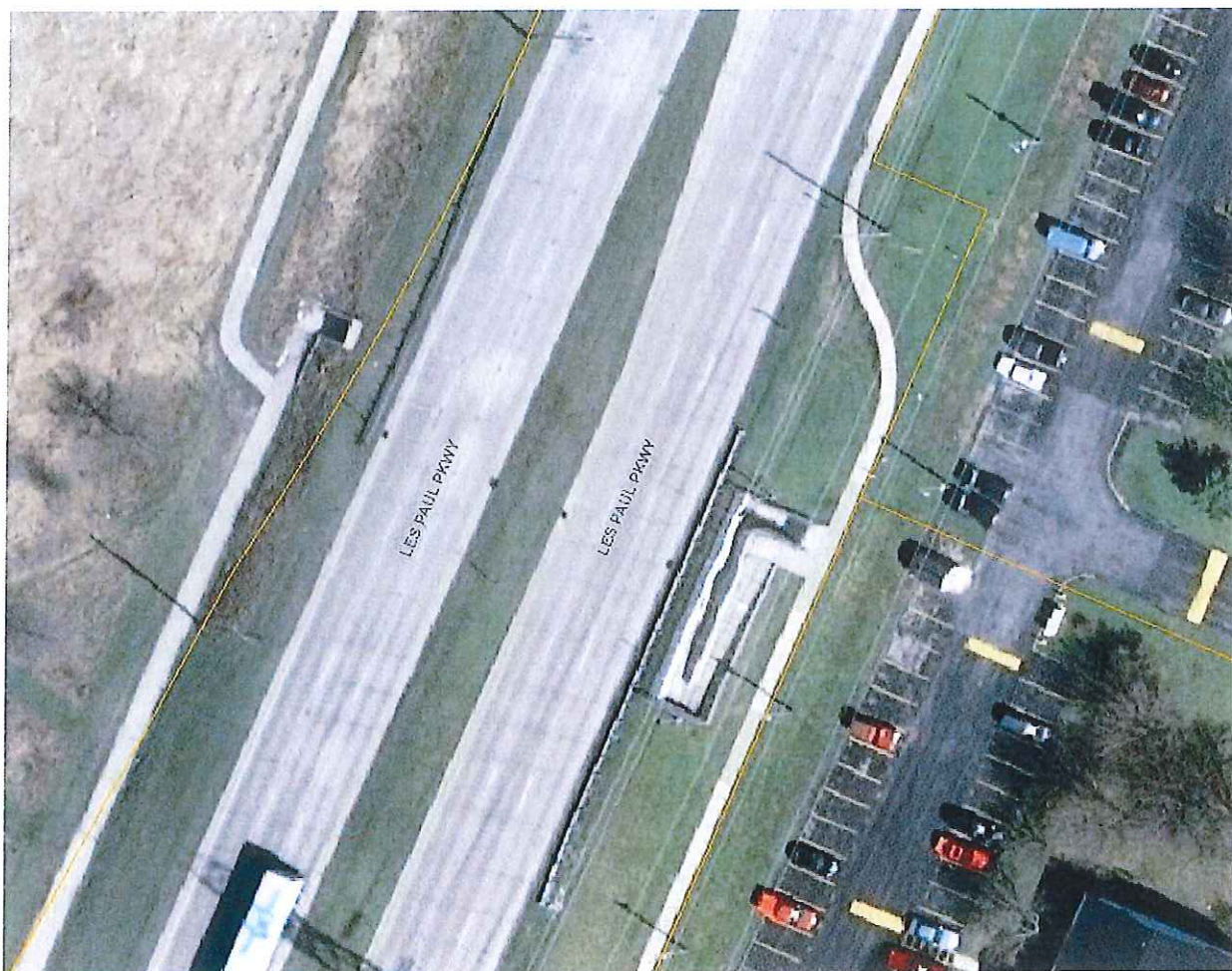
- The tunnel is used very little for pedestrian purposes.
- There is an alternate safe crossing at the signalized intersection of Sunset Drive and Les Paul Parkway
- No agency strongly supports the tunnel remaining in use.
- No agency identified a funding source for repair and ongoing maintenance of the tunnel
- There is evidence the tunnel is used for illegal activity.

Prepared by Michael F. Grulke, PE and Katie Jelacic, PE
City of Waukesha
Engineering Division

Les Paul Tunnel Location Map



Les Paul Tunnel Close Up



Tunnel Agreement

COPY
REC. 2-12-90
2773-04-71

AGREEMENT BETWEEN
THE WISCONSIN DEPARTMENT OF TRANSPORTATION
and
THE CITY OF WAUKESHA
REGARDING
THE PEDESTRIAN TUNNEL UNDER S.T.H. 59 (WAUKESHA BYPASS)
at
HEYER PARK
WAUKESHA COUNTY

SCOPE OF AGREEMENT

This agreement provides for the construction and maintenance of the above pedestrian tunnel which is being constructed in conjunction with the improvement of S.T.H. 59 between Sunset Drive and Racine Avenue in the City of Waukesha.

AGREEMENT DEFINITIONS

1. "Maintenance" - includes activities that are required to keep the tunnel operational and attractive. An example of some of these activities is listed below, but is not limited to the following:
 - a. Keeping tunnel clean and free of debris.
 - b. Removing snow and ice from tunnel
 - c. Keeping the tunnel lighting system in good operating condition.
2. "Reconstruction" - includes activities such as the removal of existing tunnel and construction of the new pedestrian tunnel.

GOVERNMENTAL RESPONSIBILITIES

The Wisconsin Department of Transportation shall be responsible for:

1. The design and reconstruction of the pedestrian tunnel, and the costs thereof.

The City of Waukesha shall be responsible for:

1. The maintenance activities associated with the pedestrian tunnel after construction is completed and accepted.
2. The energy costs associated with the lighting of this facility.
3. The costs associated with providing liability insurance for the pedestrian tunnel.
4. Policing the use of the new pedestrian tunnel.

Changes that appear desirable in terms of future operation or use will be mutually agreed upon as an addition to this agreement.

APPROVAL

This agreement is approved and enacted by:

CITY OF WAUKESHA

BY

Paul H. Voth
Mayor

Date

7/20/87

BY

Thomas E. Neill
City Clerk

Date

7/20/87

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION SERVICES

BY

[Signature]
Administrator

Date

