

**From:** [jerome.abrams](#)  
**To:** [CouncilHearing \(CI-StPaul\)](#)  
**Subject:** UST multipurpose arena  
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To St. Paul City Council Members,  
The City Council, mandated to protect the lives, health, and safety of St. Paul residents, needs to fulfill its obligation and resolve a serious safety issue. The Environmental Assessment Worksheet (EAW) for the proposed University of St. Thomas (UST) arena fails to analyze an important danger to residents, blocked first responder vehicle access for emergencies in adjacent neighborhoods during arena events.

The problem is a consequence of a number of cars needing parking, two-sided parking, and narrowing of the streets with winter snowfall. The number of cars that will need parking accommodation can saturate the space available on adjacent neighborhood streets. In addition, cars leaving the neighborhood will experience delay, because the cars must merge with traffic flow and will require both right and left turns to merge. The resulting delay from the queued cars waiting to exit was calculated at 41 minutes. With two-sided parking in winter, and for one way traffic flow, a driving lane width of only 8.5 ft or less is available for emergency vehicle access. Fire trucks and first responder ambulances are 10 ft wide and require a lane wider than 10 ft when in motion. Minnesota state fire code requires fire access road, including streets. To have a 20 ft minimum width for homes without sprinkler protection. The vast majority of homes in the adjacent neighborhoods are not sprinkler protected. With two-way traffic, and cars queued to exit in both directions, no adequate access lane will exist for fire trucks will be available, and the lane will be too narrow for ambulances.

Why will this situation occur?

The UST plan states that residential city streets will be used for parking. On campus parking will accommodate approximately 750 vehicles. A UST spokesperson stated in the EQ Monitor that events having 5500 attendees will occur 35 times a year. For an event of 5500 attendees, the UST estimate of 22% of attendees arriving by non-private motor vehicle, and 2.7 passengers per private vehicle, 1589 cars will require parking accommodation. For the FHA value of 1.7 passengers per vehicle, 2523 cars will need parking. If 750 cars park in the adjacent parking ramp, 839 to 1773 cars will need off campus parking.

Where will the cars park?

People will choose to park as close to the arena as possible, even if more distant off-street parking is available. This assumption is reasonable and has evidence. It is reasonable, because hockey and basketball are primarily winter sports, and arena attendees will likely choose to walk no further than necessary in the cold and snow. If UST charges a fee for ramp parking, free city street parking will likely be preferred. Evidence for this argument already exists. UST students and staff park on the north side of Goodrich Avenue, a street adjacent to the UST campus, even though more distant parking is available. On this portion of Goodrich Avenue, an average of 56 cars was counted from Mississippi River Boulevard to Cretin Avenue. This number of parked cars saturates the street on a daily basis when school is in session.

What streets will be used?

For further analysis, consider the neighborhood bordered by Goodrich Avenue, Princeton Avenue, Mississippi River Boulevard, and Cretin Avenue. It is adjacent to the south campus and is one of the neighborhoods that will be used for overflow parking. Making the reasonable assumption that cars will park at the same density as UST students and staff parking on the north side of Goodrich Avenue, we used this average number of cars divided by the length of the street from Mississippi River Boulevard to Cretin Avenue to calculate the number of cars that can be accommodated in this neighborhood. Over 300 cars can park on these streets. Clearly, 839 to 1773 cars are enough to saturate this neighborhood.

Why is the saturation of the adjacent neighborhood a safety problem?

Access of emergency vehicles will be blocked. This conclusion was reached by measuring the width of the streets with two-sided parking on 3/26/2024 following a moderate snowfall. A typical width of a parked car is 5 ft. The measurement did not include the width of parked pick-up trucks. For example, a Ford F-150, excluding extended side mirrors, has width of 6 ft. 6 inches. With two-sided parking and one way traffic, the width was measured at 8 ft 5 in. First responder emergency vehicles are 10 ft wide and require a lane wider than 10 ft when in motion. Again, Minnesota fire code requires access road width of 20 ft for non sprinkler protected homes.

How long will the clogged streets persist?

The Environmental Assessment Worksheet (EAW) identified Level of Service F at key intersections. With LOS F, volumes of cars exceed capacity, and delays occur. The duration of congestion is not measured, but the EAW states that, with events, "multiple unsignalized side street approaches on Cretin Avenue will be difficult to make left turn movements for 15 to 30 minutes". The EAW fails to analyze the consequences of this recognized delay. For further analysis, consider, as an example, Fairmount Avenue, from Woodlawn Avenue to Cretin Avenue. This section of Fairmount Avenue is merely one block from the south campus and is a likely choice for parking. With two-sided parking, 84 cars can be accommodated in this portion of Fairmount Avenue. Cretin Avenue is the likely choice of exit from this street. Exiting on Cretin Avenue requires both right and left turns. Exit time to Cretin Avenue from Fairmount Avenue was measured at 2-minute intervals from 4:36 PM to 5:30 PM on 4/9/2024 without a special event in progress. Average delay for cars to enter the traffic flow on Cretin Avenue was 41.4 seconds. Exit time for cars that queue at the exit was modeled using the method of Mao et. al. (Mao, X et al., Optimal Evacuation Strategy for Parking Lots Considering the Dynamic Background Traffic Flows, Intl J Environ Res and Public Health, 2019,16:2194) Their model assumes no left turn, no non-motorized or pedestrian traffic, and exit of only one car at a time. Their published numerical simulation for two exits onto a street with background traffic flow that reasonably approximates the conditions of Fairmount Avenue exiting to Cretin Avenue demonstrated a delay of 17 minutes and 28 minutes, respectively. Using their model, and again assuming one way traffic and no non-motorized traffic, queue clearing time from Fairmount Avenue to Cretin Avenue was calculated at 41 minutes. During this interval, a lane of only 8.5 ft width will be available for emergency vehicles, if traffic is only one way. During the winter snow season, residential streets with 2-sided parking, two way traffic, and cars queued to exit in both directions, will be clogged. No driving lane will be available for emergency vehicles. With two-way traffic and thousands of pedestrians converging on the neighborhood with an arena event, the delay time is likely to be increased. Details of the calculation have already been

submitted in the Application for Zoning Appeal submitted by Daniel L.M.Kennedy, 4/15/2024 and are included in the appendix to this email . The EAW solution for this safety risk is, "Communication should be made to area residents and other sources of commuter traffic, so they are aware of potential traffic ...". This thoughtless statement would require neighborhood residents to schedule heart attacks, strokes, or other emergencies around the basketball and hockey schedule, an impossible task that can only fail.

Why is the delay a problem?

American Heart Association guidelines state that for, heart attack, door to treatment time goal is less than 30 minutes. For stroke, door to treatment time goal is less than 60 minutes. These guidelines will be impossible to meet under these conditions.

Delay causes irreversible loss of heart tissue, irreversible loss of brain tissue, and increased risk of death. The obstruction of emergency vehicle access to the neighborhood as a result of the arena events risks the lives, health, and safety of neighborhood residents. Please note that the Environmental Assessment Worksheet (EAW) identified 1 death and 3 serious crashes without an arena event.

This concern has been communicated to the planning commission during oral testimony and was ignored by the commission. The residents of St. Paul can reasonably demand that the City of St. Paul government protect the lives, health, and safety of its residents. I am asking the City Council to fulfill its duty to citizens of St. Paul and not approve the current arena plan. Approving the current UST arena plan ignores this safety concern and increases the risk of death, serious illness, and destruction of homes to neighborhood residents.

Respectfully submitted,

Jerome H. Abrams, M.D.

Macalester-Groveland Resident