

King Arthur Boulevard Traffic Calming Project Concerns

Submitted to the Lewisville City Council for consideration on 8/18/2026 from Christine Hixon

Introduction

Thank you to the Mayor and City Council for being open to discussion on the King Arthur Traffic Calming Project. The City, residents, and visitors are learning more each day about how this project functions in real-world traffic, not just on plans or in a controlled test. That new information can help us make practical changes while keeping the original goal: a safer King Arthur Boulevard.

I have been a Castle Hills resident since 2001. For almost 20 years I lived about 350 feet (roughly one short residential block) away from King Arthur Boulevard. For the past 5 years, I have lived just a few blocks away from Lady of the Lake Boulevard. Throughout that time, I do not recall having any significant safety concerns about King Arthur. The most common issue I saw was impatient drivers passing around ‘slower’ drivers and rolling stops at stop signs.

The City's November 2024 presentation said the main concerns about King Arthur Boulevard were speeding and stop-sign running. It described King Arthur as a 46-foot collector with a 25 mph speed limit and an 85th-percentile speed of 32 mph. Those concerns were real. The question now is whether the installed design reduces those problems without creating new and more serious risks.

1. Bump-Out Visibility and Driver Guidance

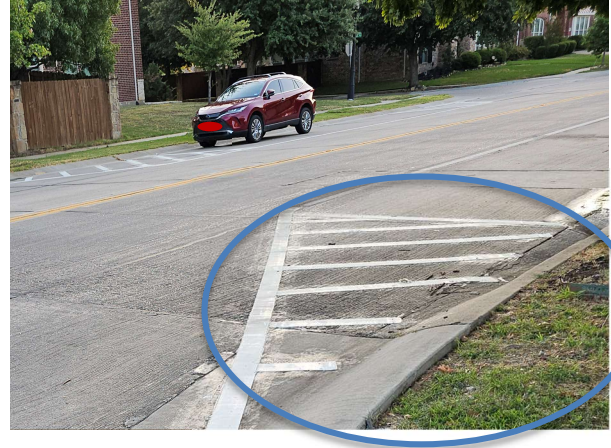
Are the bump-outs easy enough to see, understand, and navigate before a driver reaches them?

***Why this matters:** The bump-outs intentionally move drivers away from the curb and change the normal path of travel. Texas traffic-control guidance is built around giving road users clear, timely information about roadway alignment and obstructions. The Texas Manual on Uniform Traffic Control Devices is the state standard for traffic signs, pavement markings, and other traffic-control devices. For King Arthur's bump-outs and low concrete separators, the most relevant provisions include items such as white channelizing or edge lines, and diagonal or chevron markings to make the obstructions more visible. A useful local comparison already exists nearby: on Lady of the Lake between Windhaven and Sir Lovel, white diagonal pavement markings begin before the parking lane and visually guide drivers away from the curb before the physical space changes. That type of pre-stripped marking gives drivers an early visual cue instead of expecting drivers to react when the obstruction suddenly appears.*

- At what distance should an unfamiliar driver recognize a bump-out and understand the correct path?
- Has the City reviewed each bump-out at night, in glare, and in wet conditions from a driver's eye level in vehicles of different heights?
- Why were advance diagonal white pavement markings or another transition treatment not used before the King Arthur bump-outs?
- Which bump-outs show the most tire marks and are candidates for advance paint markings or reshaping?
- What are the pros and cons of adding white diagonal pavement markings before each bump-out?
- What needs to happen to implement adding white diagonal pavement markings and how soon could that occur?

A driver should be guided around a roadway feature before reaching it, not forced to discover it at the last second.

Nearby example: Lady of the Lake pavement guidance



Left shows the first bump out on King Arthur as you turn right from Lady of the Lake with no advance white striping to indicate that an obstacle is ahead.

Right shows existing Lady of the Lake treatment between Windhaven and Sir Lovel: diagonal white markings begin before the curbside/parking area, creating an advance visual transition.

2. Concrete Bike-Lane Barrier Visibility and Roadside Risk

Are the low concrete separators visible enough, and are the consequences of hitting them reasonable?

Why this matters: The separators are low, rigid objects placed close to moving traffic. The City says they were chosen for durability, bicycle separation, and lower maintenance. But traffic engineering also places strong value on visibility and clear roadway definition. The 2025 TMUTCD uses reflective markings, object markers, and above-roadway delineation to help drivers see alignment and fixed features. It also recognizes several ways to separate bike lanes; concrete is one option, not the only option.

- What testing shows the concrete separators are easy to see at night, in rain, and in headlight glare?
- What happens when a tire touches one at 20-25 mph, and how was that consequence considered in the safety analysis?
- Would flexible posts or a different material separator make the bike lane easier to see and more forgiving?
- If damage and tire marks keep appearing in the same places, when does that become evidence that the treatment itself should change?

The extent of visible damage to these barriers suggests a recurring problem, not a handful of unusual incidents.

3. Normal Human Error and Recovery Space

Does the design leave enough room for a normal driver to make a small mistake and recover safely?

Why this matters: The Federal Highway Administration's Safe System approach starts with a simple idea: people make mistakes, so roads should reduce the chance that a small mistake becomes a serious crash. Drivers may drift a few inches, look toward a pedestrian, react to another car, or overcorrect when something surprises them. Good drivers can still make reasonable errors. A road should not require perfect positioning on every trip.

- What margin for normal lateral error was built into the King Arthur design?

- What happens if a vehicle is six inches or twelve inches off the ideal path?
- Can a driver recover, or does a small error immediately put a tire into concrete or push the vehicle toward opposing traffic?
- Has the City considered whether some good drivers may overreact when a bump-out or barrier is recognized late?

When a minor mistake can lead directly to concrete, the road leaves too little room for error and reduces safety.

4. Overall Real-World Behavior and Post-Installation Data

Is King Arthur actually safer now, and how are we measuring the new risks?

Why this matters: The original problems were speeding and stop-sign running. Residents report that both still occur, while new problems have appeared, including vehicles striking the concrete obstructions, damaged cars blocking traffic, and impatient passing into oncoming traffic. The bump-outs near the turn into Enchanted Hill are creating queues. A line of cars can tempt an already impatient driver to pass where there is oncoming traffic. The City's FAQ says long-term speed studies are planned after drivers adjust, but safety problems that can be observed now should not have to wait six to nine months. And there will always be visitors driving the street for the first time.

- What was the before-project baseline for crashes, speeds, stop-sign compliance, centerline crossings, and aggressive passing, and what are the comparable numbers now?
- Will the City use video or field observation to measure Enchanted Hill queue lengths, passing into oncoming traffic, and lane-position errors?
- Are tire/wheel damage, physical strike marks, cyclist incidents, maintenance records, and resident reports being gathered in one place?
- If speeds decrease but opposing-lane conflicts or fixed-object impacts rise, how will the City decide whether total safety has improved?
- What problems would trigger an immediate change instead of waiting for the full study period?

Road design must account for ordinary mistakes, unfamiliar drivers, and predictable bad behavior.

5. Emergency Vehicles, Buses, Trucks, and Real-World Turning

Can large and emergency vehicles safely use the corridor under normal traffic conditions, not just in a controlled demonstration?

Why this matters: The City's dump-truck-and-trailer video shows that one large vehicle with knowledge of this roadway can complete one turn under controlled conditions. Real traffic is harder: another vehicle may be approaching, cars may be queued, a cyclist may be present, or an emergency vehicle may be moving quickly. The City's 2024 presentation itself recognized emergency-response effects and unintended consequences as valid reasons not to use some traffic-calming devices.

- How have fire apparatus, ambulances, school buses, sanitation trucks, delivery trucks, and trailers been tested through the corridor during normal traffic?
- What tests have been conducted to determine if such vehicles can turn without requiring an oncoming driver to stop, back up, or make an evasive move and without hitting the concrete bump-outs?

- How has the Fire Department evaluated response-time and maneuvering effects, not just physical clearance?

It is not enough to demonstrate that one large vehicle can physically negotiate a turn under controlled conditions.

6. Bike-Lane Width, Use, and Obstacles

Are the bike lanes wide, cleanable, and practical enough that cyclists will want to use them?

Why this matters: A protected lane only works if it stays usable. The King Arthur bike lanes vary significantly along the corridor, with concrete separation in some areas and no physical separation in others. Their already limited width can be reduced further by trash carts left in the lane, overhanging branches, debris from damaged reflectors or concrete separators, and cars parking in sections of the bike lane. Because the lane is very narrow, even minor obstructions may force cyclists to stop, maneuver around them, or leave the bike lane entirely.

- What is the narrowest bike-lane width on King Arthur and how does that compare to applicable design guidance?
- How will glass, gravel, leaves, branches, and other debris be removed?
- Can the City's current road sweeper clean every protected section?
- Who is responsible for making sure Republic Services does not leave trash and recycling carts blocking the lane?
- Is the City counting cyclists and asking whether they feel safer and prefer the new facility?

A protected bike lane is only beneficial if cyclists use it and feel safe.

7. Safer Alternatives and Comparable Designs

Could we keep the safety goals while using designs that are easier to see, more forgiving, and simpler to maintain?

Why this matters: There are options between keeping every feature exactly as built and going entirely back to the old road. We could have better transition striping, buffered bike lanes, selective physical separation, smaller or reshaped bump-outs, and targeted speed treatments. Carrollton is a useful nearby comparison. On the Eisenhower Drive corridor, which has a 30 mph speed limit, the bike accommodation is a conventional striped treatment rather than low concrete separator curbs.

- Could King Arthur use stronger advance striping like Lady of the Lake instead of relying on physical bump-outs?
- Could specific bump-outs be shortened, reshaped, or removed where repeated problems occur?
- Could a striped or buffered treatment similar to Eisenhower work on portions of King Arthur while still preserving bicycle space and speed control?
- What have Carrollton and other nearby cities learned about which bike-lane treatments work best on suburban collector streets?

The goal should be to keep what works and change what does not, not to defend a design because it was the first design chosen.

8. Long-Term Maintenance and Cost

What will the project cost to operate and maintain over time?

Why this matters: The City says concrete separators were chosen partly for longer life and lower maintenance. But total cost includes more than replacing a separator. It also includes sweeping, debris removal, repainting, drainage, damaged concrete, trash operations, inspections, and staff time. Those costs should be compared with simpler alternatives.

- With the observed rate of damage to the concrete separators and bump-outs and the reflectors on them, what is the expected annual and 10-year maintenance cost?
- How do those costs compare with striped buffers, flexible delineators, or other designs?
- Will maintaining the bike lanes require specialized sweeping equipment, manual cleaning, or additional tree and shrub trimming?

The widespread reflector damage is early real-world evidence that maintenance may be more frequent and more costly than originally assumed.

9. What Happens Next?

What evidence would cause the City to modify or remove a feature, and what is the plan for learning enough to make that decision?

Why this matters: A real evaluation needs a point at which evidence leads to action. If repeated impacts and issues can never cause a design change, then the project is not really being evaluated. At the same time, the next phase does not need to be complicated. The most useful steps are to observe the road carefully, compare before-and-after data, test problem locations, and get another engineering viewpoint where needed.

- What specific data will the City collect next: speeds, stop-sign running incidents, crash reports, queue lengths, passing into oncoming traffic, bike use, and physical strike evidence?
- Will another traffic engineer or consultant review the highest-conflict locations or provide an independent perspective?
- Will Carrollton or other cities be asked about their experience with bike-lane separators, maintenance, and traffic calming?
- When will Council receive the results and the City's recommendation about what should stay, change, or be removed?
- What physical changes is the City willing to test now - such as advance striping, added reflectors, different separators, or changes to selected bump-outs?

The most important question is not whether the original design was reasonable; it is whether new evidence points to a safer design.

Conclusion

I support the City's goal of making King Arthur safer. Changing part of this project would not mean the goal was wrong or that the work was wasted. It would mean the City learned from real-world results and improved the design.

We also should not let the money already spent decide what happens next. That is the sunk cost fallacy: past spending cannot be recovered, so it should not control a decision about future safety. Whether the City keeps every feature, changes some, or replaces some, the money already spent is the same. The decision now should be based on which option gives residents the safest and most workable roadway from this point forward.

After looking at speeds, crashes, driver behavior, bike use, emergency access, maintenance, and normal human error: is King Arthur safer now, and what changes would make it safer still?