



# City of Denton

City Hall  
215 E. McKinney Street  
Denton, Texas  
[www.cityofdenton.com](http://www.cityofdenton.com)

---

## AGENDA INFORMATION SHEET

**DEPARTMENT:** Capital Projects

**CM/ DCM/ ACM:** Mario Canizares

**DATE:** May 7, 2018

### **SUBJECT**

Receive a report, hold a discussion regarding existing at-grade railroad crossings and the proposed Quiet Zones in the City of Denton.

### **BACKGROUND**

Three major railroads traverse through the City of Denton with 34 at-grade railroad crossings. The three railroads are Union Pacific Railroad (UPRR) which has 16 at-grade crossings, Kansas City Southern (KCS) which has 9 at-grade crossings and Denton County Transportation Authority (DCTA) which has 9 at-grade crossings (Exhibit 1). All DCTA at-grade crossings are currently Quiet Zones (QZ). The UPRR crossings are categorized into the northern segment which include 8 at-grade crossings, Downtown Segment with 4 crossings and Southern Segment with 4 crossings.

The Federal Railroad Administration (FRA) requires trains to blow horns at at-grade crossings for 15-20 seconds from crossing and through the crossing. The horn sound is 96-110 decibels approximately 100 feet from the crossing (see Exhibit 4). Typically, QZ are implemented to reduce the noise near a residential neighborhood, school, hospital or other sound-sensitive area. QZ is implemented at one or group of crossings that use supplemental safety measures (see Exhibit 3) to eliminate use of train horns.

The UPRR crossings in the downtown segment include; Prairie, Sycamore, Hickory and McKinney crossings. The funding of over one million dollars (\$350,000 bond funding and \$600,000 Hickory Street enhancement project) was approved for implementing QZ along the downtown segment of the UPRR. Staff has been working on the Downtown QZ project for the last five months and will be starting the QZ project on the northern segment by late summer this year.

Steps in establishing a Quiet Zone:

- ❖ Conduct evaluation to determine possible treatments and approximate cost.
- ❖ Contact railroad to determine if warning devices comply with the rule and collect train operational data for use in calculating risk.
- ❖ Conduct diagnostic team review to finalize recommendations.
- ❖ Request plans, estimates, and agreements from railroad for any work to be done by the railroad.
  - UPRR prepares plans, design and estimated (approximately 60 to 90 days)
  - UPRR construction (order and obtain material, schedule construction and complete construction – approximately 12 months)
- ❖ File notice of intent to create a quiet zone (approximately 60 days). This can move concurrently with the previous step.
- ❖ Complete quiet zone improvements.

- ❖ File notice of establishment to create a quiet zone (approximately 30 day).

Staff has worked with CTC, Inc. in the past five months to complete the first three steps and is currently working with UPRR on the fourth step. A diagnostic review was conducted by a team of professionals that comprised of City staff, CTC staff, Federal Railroad Administration (FRA) staff and UPRR staff in January. The team reviewed existing conditions and developed recommendations for improving the crossings at the four downtown locations to qualify for QZ. Subsequently, City staff worked with UPRR staff to prepare and execute an agreement for developing the engineering plans for the proposed improvements. Currently, UPRR staff is working on developing the engineering plans and cost estimates for the proposed improvements which will require approximately 60 days and is planned to be completed by May 2018.

After the completion of the design UPRR will provide a cost estimate to the City. If this cost is acceptable to the City, an agreement between UPRR and City will be executed to pay UPRR to implement the improvements and establish a QZ in the Downtown area. Once such agreement is signed and the City authorizes UPRR to move forward the construction phase will require approximately 260 days. Based on the overall schedule of the project we are on track to complete the QZ by July 2019.

### **ESTIMATED SCHEDULE OF PROJECT**

The overall project is anticipated to be complete by July 2019.

### **PRIOR ACTION/REVIEW (Council, Boards, Commissions)**

Informal Staff Report to Council on April 6, 2018

### **STRATEGIC PLAN RELATIONSHIP**

The City of Denton's Strategic Plan is an action-oriented road map that will help the City achieve its vision. The foundation for the plan is the five long-term Key Focus Areas (KFA): Organizational Excellence; Public Infrastructure; Economic Development; Safe, Livable, and Family-Friendly Community; and Sustainability and Environmental Stewardship. While individual items may support multiple KFAs, this specific City Council agenda item contributes most directly to the following KFA and goal:

**Related Key Focus Area: Public Infrastructure**

**Related Goal: 1.6 Collaborate with local, regional, state, and federal partners**

### **EXHIBITS**

1. AIS
2. Map of Railroad Crossings
3. Map of Planned Quiet Zones
4. Supplemental Safety Measures
5. Train Horn - Noise Cones
6. Wayside Horn – Noise Cones

Respectfully submitted:

Pritam Deshmukh

City Traffic Engineer

(940) 349-7710