

Lewisville Public Meeting Wayside Horn Impacts September 27, 2011 6:30 pm



# Agenda

- Where we are today
- Considerations
  - Citizen complaints regarding wayside horns
  - Quiet Zone process
  - Design challenges: access, large vehicles
- Recommendation
- Public Meeting



# Recommendation

- **<u>Eagle Point</u>**: No change, TxDOT design concerns
- <u>Bennett</u>: Additional signing and striping; review preemption
- Business 121: Additional signing and striping; review preemption
- Main: Additional signing and striping; review preemption
- **Cowan**: Extend median 5'
- <u>Lake Park</u>: Extend median 6'; additional signing; review preemption
- <u>Purnell</u>: Implement SSM (four options)



### Wrapping Up Construction







### A-train Vehicle Procurement





- Opened with interim vehicle (RDCs)
- Future vehicle DMU
  - Diesel-electric
  - Low profile, similar to light rail
  - 200 passenger capacity
  - Level boarding
  - Bike and luggage racks
  - Quieter, smoother operation
  - Future Regional Applications
  - Alternative Compliance Crash Energy Management



## A-train Ridership



- Rock N Rail Event carried more than 8,300 passengers
- Free week of service carried more than 20,000 passengers
- First two weeks of revenue service more than 14,000 passengers
- Weekday averaging 1,200 passengers
- Saturday averaging 900 passengers
- 25% growth in weekday since 8/29 (first full week of school)



# Lewisville QZ Overview

- 13 total crossings between Frankford & Eagle Point
- Combination of SSMs and ASMs including 5 wayside horns at Bennett, Bus. 121, Purnell, Main, and Eagle Point
- SSM's are 4 quadrant gates, 100 ft median barriers/channelization devices, or one-way streets with gates



# DART vs. DCTA Crossings

- No freight traffic on DART Light Rail
- TRE line faces same challenges with Federal Railroad Administration oversight



# **Developing a Solution**

- Turn off horns wherever possible quickly
- Improve Safety
- Cost Effective for all agencies
- Minimize 2<sup>nd</sup> order effects
- Meet quiet zone regulatory requirements (49 CFR Parts 222 and 229 – Use of Locomotive Horns at Highway – Rail Grade Crossings)
- Focus on SSM's
- Be good neighbors



## **Quiet Zone Process**

 Treat each public highway-railroad grade crossing with Supplemental Safety Measures (SSMs)

#### ---- OR ----

• Treat each crossing with SSMs or Alternative Safety Measures (ASMs) and ensure Quiet Zone Risk Index is less than or equal to the Nationwide Significant Risk Threshold or the Risk Index With Horns



# Time Line

#### Supplementary Safety Measures

- Up to 60 day notice of intent (can be concurrent with construction)
- Construction Time
- 21 day notice of establishment does not begin until construction completed

#### Alternative Safety Measures

- Up to 60 day notice of intent (can be concurrent with construction)
- FRA review (90-180 days)
- Construction Time
- 21 day notice of establishment does not begin until construction completed



# Eagle Point

- Exit ramp proximity to track and tight geometry
- Incidents of vehicles stuck on tracks
- No practical means of implementing an SSM
- Will be greatly improved with 35E construction, but timing is an issue
- Needs further study

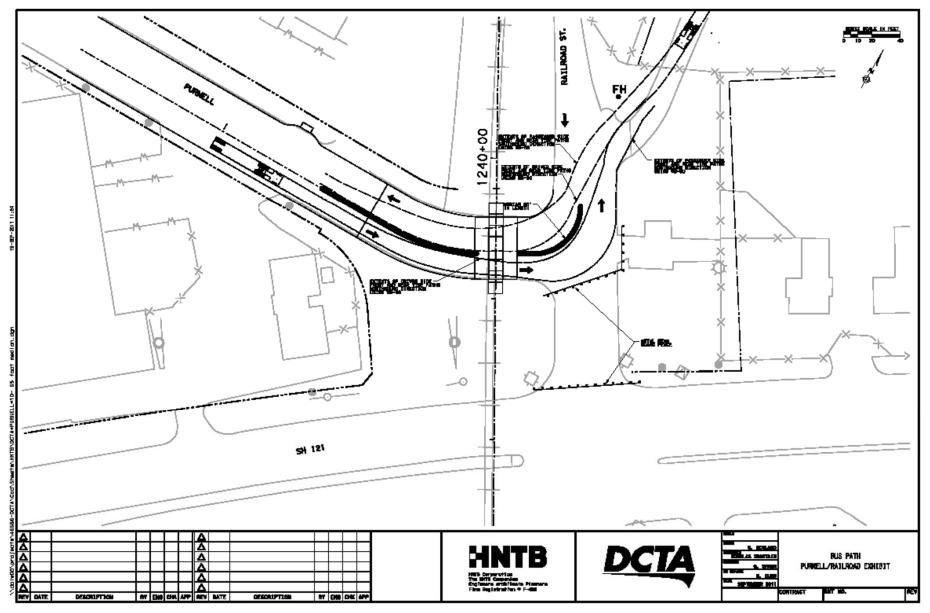


# **Purnell SSM Options**

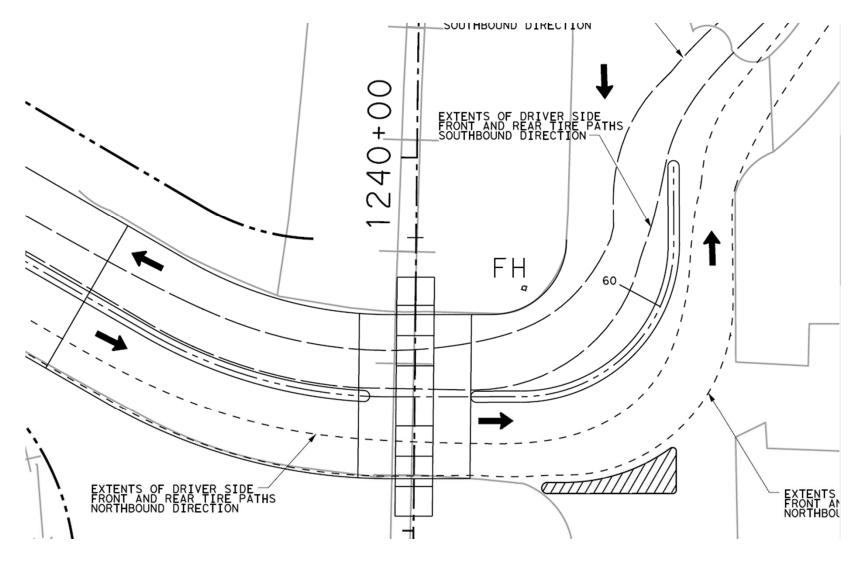
- <u>Option 1</u> Closure (High impact Not Considered further)
- <u>Option 2</u> One-way with Gates (High Impact Not considered further)
- Option 3 Eliminate access from Purnell & Railroad to Bus. 121 and create medians (Access and Large vehicles)
- <u>Option 4</u> Four Quadrant Gates (High Cost and 90 day lead time)



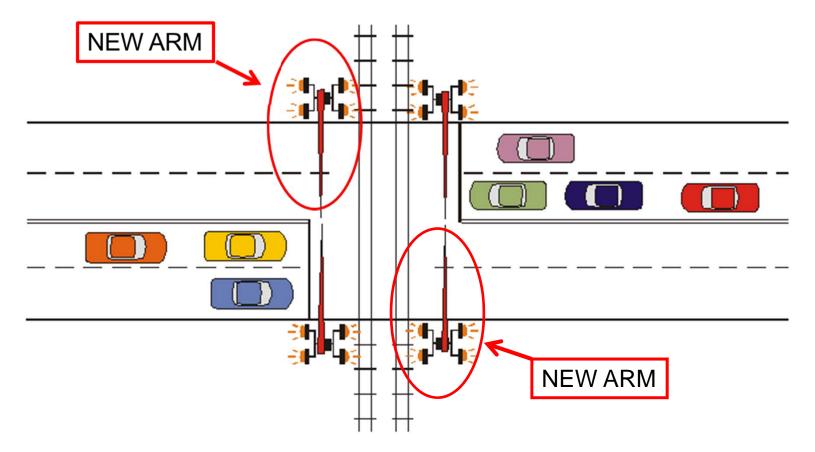
### Purnell: Option 3 Drawing



### **Purnell: Option 3 Drawing**



# Purnell: Option 4 Sketch





# Where Do We Go From Here?

- Bring solutions back to DCTA Board and City of Lewisville to finalize plan, get final cost estimates, and develop funding plan.
- Implement as soon as possible



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### Questions/Comments?

