

Memorandum



CITY OF DALLAS

DATE October 10, 2008

TO Council Transportation and Environment Committee:
Linda Koop, Chair; Sheffie Kadane, Vice Chair; Jerry R. Allen,
Carolyn R. Davis, Vonciel Jones Hill, Angela Hunt, Pauline Medrano,
Ron Natinsky

SUBJECT Traffic Barricades Briefing
October 13, 2008

Attached is the "Traffic Barricades" briefing that will be presented to you on Monday, October 13, 2008 at the Transportation and Environment Committee Meeting.

Please contact me if you need additional information.

A handwritten signature in black ink, appearing to read "Ramón F. Míguez".

Ramón F. Míguez, P.E.
Assistant City Manager

Attachment

RFM/EAR/cjs

c: The Honorable Mayor and Members of the City Council
Mary K. Suhm, City Manager
Thomas P. Perkins, Jr., City Attorney
Deborah Watkins, City Secretary
Craig Kinton, City Auditor
Judge C. Victor Lander, Judiciary
Ryan S. Evans, First Assistant City Manager
Ramón F. Míguez, P.E., Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
A.C. Gonzalez, Assistant City Manager
David O. Brown, Interim Assistant City Manager
David Cook, Chief Financial Officer
Jeanne Chipperfield, Director, Budget and Management Services
Edward Scott, Director, Controller's Office
Helena Stevens-Thompson, Assistant to the City Manager – Council Office
Rick Galcerán, P.E., Director, Public Works and Transportation

Traffic Barricades

**Presented to the
Transportation and Environment
Committee
October 13, 2008**



**Presenter: Elizabeth Ramirez, P.E.
Assistant Director
Public Works & Transportation**

Purpose of Briefing

- Present overview of traffic barricade and lane closure practices and procedures
- Present issues and actions to improve the visibility and safety of lane closures

Background

□ Traffic barricade standards

- State of Texas Manual on Uniform Traffic Control Devices
- City of Dallas Traffic Barricade Manual

□ Typical traffic barricading equipment



BARRICADES



CONES



ARROW BOARDS



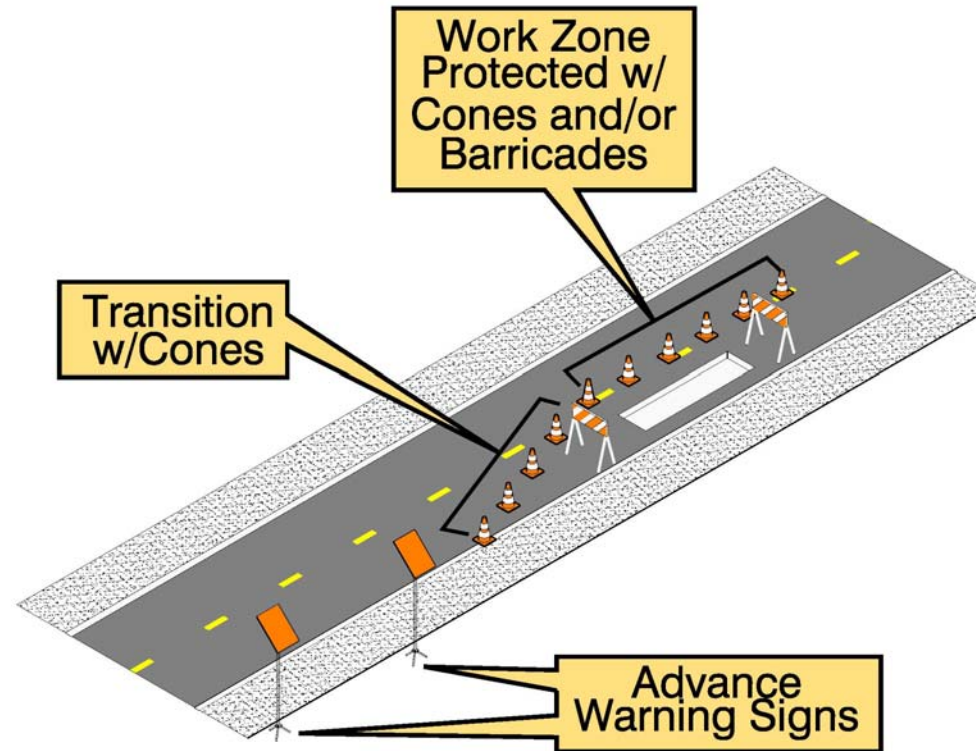
CONSTRUCTION
SIGNS



VESTS

Background

- ❑ The City of Dallas Traffic Barricade Manual defines typical layouts of signs, cones and barricades
- ❑ Typical layouts vary in length and equipment types based on:
 - Speed limit
 - Number of lanes
 - Day vs. night
 - Duration of work



Background

- Traffic barricading standards are enforced through:
 - Street excavation and building permits
 - Define requirements
 - Citations
 - Civil fine defined by City ordinance
 - City staff inspections
 - Correct unsafe conditions
 - Issue citations

Traffic Barricade Issues

- Traffic Barricade Manual
- Barricade equipment (cones, barricades, & signs)
- Non-compliance with standard layouts
 - Contractors
 - City crews
- Enforcement
 - Lack of well-defined penalties
 - Lack of staff to proactively patrol for violations

Traffic Barricade Issues

□ Traffic Barricade Manual

- A City *Traffic Barricade Manual* is required to define procedures and costs specific to the City
 - Based on Manual on Uniform Traffic Control Devices (MUTCD) which defines national standards
- Current Traffic Barricade Manual is out of date
 - Procedures changed related to permits and fees
 - Standards for reflectivity of signs/barricades increased
 - All City contracts and specifications require contractors to use latest MUTCD standards
- City ordinance ties all citations to the *Traffic Barricade Manual*
 - Updates are required to maximize citation issuance

Traffic Barricade Issues

□ Actions: Traffic Barricade Manual

- Established a barricade task force committee
- Reviewed procedures and contracting specifications to improve efficiencies and ensure latest standards
- Completed a draft document in September 2008

□ Next Steps

- Review draft document with private sector
- Jan 2009 - PWT Director approves and authorizes new Traffic Barricade Manual
- Distribute free *Traffic Barricade Manuals* at construction permit offices and publish online

Traffic Barricade Issues

□ Issue: Barricade Equipment

- City crews and contractors need to replace cones, signs and barricades to meet latest standards
 - Existing equipment meets standards
 - Newer equipment is more crashworthy and visible
 - Materials are more forgiving in a crash
 - Materials use higher reflectivity standards
 - Flashers are not required but desired at some locations:
 - Reflective materials on the cones/barricades give most visibility to work zone (illustrated on slides 11&12)
 - Flashers are high maintenance (theft, reliability of batteries)
 - Desired at locations with curves or low light conditions
 - Desired on sidewalks or bike trails since reflective materials depend on headlights from vehicles to illuminate the work zone

Example of Daytime Visibility



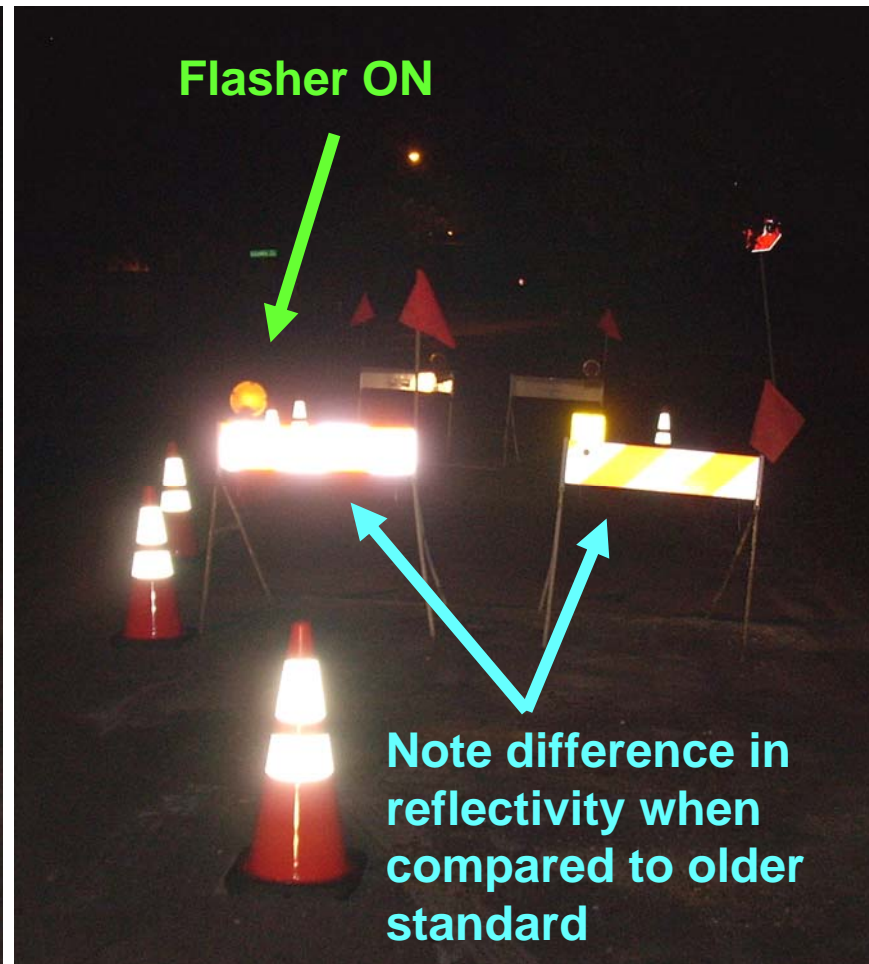
Example of Night Time Visibility



Note that reflective material on signs, cones and barricades give greatest visibility to work zone

Reflective Material

More Visible – More Reliable than Flashers



Traffic Barricade Issues

□ Actions: Update Equipment

- City Crews

- New barricades, cones and signs will be incrementally purchased to update inventory
- Some existing equipment will be refurbished with enhanced reflective materials
- Departments plan to complete updates by 2011

- Contractors

- New contracts will require latest standards
- Non-compliance will result in a citation

Traffic Barricade Issues

□ Issue: City Forces non-compliance with standard traffic barricade layouts

- City crews must also follow barricade standards
- Crew leaders lack training on latest standards

□ Actions:

- Managers recently attended training classes
- PWT staff conducting inspections of City Force jobs
- Starting Jan 09, crew leaders will be issued Notices of Violation
 - Copy of NOV will be sent to Dept. Directors
 - Will be included in performance evaluations

Traffic Barricade Issues

□ Issue: Contractors non-compliance with standard traffic barricade layouts

- Unaware of standards or fail to budget for barricades
- Violate requirements to complete work

□ Actions:

- Proactively distribute manuals/brochures in the field, online and at permit offices
- Acknowledge requirements during permit application
 - Permits will require applicant to designate a person responsible for barricade layouts

Traffic Barricade Issues

□ Issue: Enforcement

- Work sites are shut down until safety is established
- Citations issued to repeat offenders
- Serving persons vs. corporations

□ Actions:

- Council recently amended code to include \$500 fine
- Citations must indicate which requirement of the City Barricade Manual was violated
- Currently updating permits to designate responsible corporations or persons

Traffic Barricading Issues

□ Issue: Staff

- 2 PWT inspectors specialized in barricades
- City-hired contractors: project managers & inspectors
- Private development contractors: building inspectors
 - Other departments focus on project specific work

□ Actions

- Actively educate contractors and train city staff
- In April 09, assess need for additional staff in preparation of budget

Conclusion

Staff goals

- January 2009 – PWT Director will approve and authorize new City Traffic Barricade Manual
- FY08-09 - Increase percentage of work zones in compliance compared to total work zones inspected
- August 2011 - Update all City traffic barricade equipment with enhanced equipment and materials