

TRAFFIC MANAGEMENT FOR TEMPORARY WORK ZONES



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Final Draft Report

TRANSCORE



Special Thanks

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WHY THIS PROGRAM IS NEEDED AND WHAT WILL IT DO?

Traffic Management and Safety is everyone's concern and this program will improve safety and mobility by reducing unnecessary construction work zone delays. This program will make the City of Tucson a safer and more convenient place to travel. The program's goals are to reduce travel frustration, improve work zone safety, maintain emergency vehicle response times, create positive public relations, and reduce liability exposure.

PROGRAM GOALS

- Manage roadway restrictions to reduce delays and frustration
- All zones in substantial compliance with MUTCD and NCHRP 350 guidelines
- Allow roadway improvements in a planned and efficient manner
- Minimize Impacts to Emergency Vehicle Response Times
- Program to become "Cost Neutral"
- Improve Work Zone Safety
- Maintain Community Mobility
- Travel Convenience
- Positive Public Relations
- Reduce Potential Liability





CURRENT CONCERNS

This type of program is being used successfully in cities and counties across the country, and is becoming more common in areas where road congestion is an increasing concern.

- City receives approximately **3000** requests for traffic control permits per year, and the numbers are growing annually.
- Need to coordinate construction work between various agencies
- Insure everyone follows the same rules.
- Traffic being restricted during heavy traffic due to roadway maintenance and utility operations.
- Permit requests submitted late, not allowing for proper review time nor notification time to affected parties and emergency services.
- Insufficient oversight of restriction impacts.
- Many permits are open for long periods of time with no work taking place.
- Sidewalks and transit stops being blocked without authorization or proper treatment.
- Signs and barricades blocking traffic with no work taking place.
- Contractors and utilities have no incentive to clear roadway as soon as possible.



SAFETY FACTS ABOUT WORK ZONES

Nationwide:

- ♦ One work zone fatality every 7 hours (3 a day).
- ♦ One work zone injury every 15 minutes (143 a day).
- ♦ Accidents typically rise 300% in construction zones.

“...key to effective work zone management is monitoring the work area’s traffic accident experience so that potential hazards can be corrected.”

School Bus Run-Off Bridge Accident
Omaha, Nebraska, October 13, 2001
National Traffic Safety Board Report
NTSB/HAR-04/01





KEY ELEMENTS OF THE PROGRAM

- All contractors, utilities, and government crews must follow the same rules.
- Permit applicant certifies that they are in substantial conformance with the MUTCD and NCHRP 350 guidelines (Cone usage will be added to the City’s additions to the MUTCD).
- Manage the time that permits are open and the locations are restricted.
- No restrictions allowed during Peak Travel Times, Major Holidays (The City will base each plan on the congestion of the street for permitting off-peak lane closures before 7:00 AM and after 3:00 PM).
- Coordination with City Engineer and ParkWise Parking Program Permit Program.
- Fines for Failure to Obtain Permit.
- Fines for Restricting travel way, sidewalks, transit zones, but no work under way.
- Fines for Peak Hour Non-Emergency Work.
- Annual permit available for public utilities for short-term, multiple location work.
- Review and permit fees doubled for late submittal (72 hours notice minimum).
- No Fees may be waived except via Director of Transportation.

Proposed Fee Schedule

Permit Fee \$75	For each permit for up to 30 days.
Review Plan Fee \$50	Traffic Control Plan Review Fee
Annual Permit for Public Utilities \$12,000/year	City wide permit for short term multiple location work

- All fees are doubled if request for permit is submitted late (3 workday submittal in advance of start date minimum)





VIOLATIONS AND FINES

The program includes a schedule of fines to minimize the improper or unneeded use of traffic control devices. **All review and congestion fees are tripled if working without a permit plus civil sanction fine as noted below.**

Civil Sanctions for Temporary Traffic Control Violations

Civil Sanction Per Day	Violation Description
\$1500	Presenting an eminent risk of death or injury to the public within public right-of-way.
\$1000	Restricting the right-of-way without proper certification or a barricading permit for more than 30 minutes.
\$1000	Restricting traffic during peak hours without permission.
\$1000	Failing to correct or cure a violation, within the time period stated in the warning notice.
\$1000	Restricting traffic at signalized intersections without active work occurring within 30 minutes.
\$500	Violating the restriction limits, times or locations, and the barricading permit.
\$250	Leaving advanced warning signs facing traffic for more than 45 minutes after restriction has been removed.
\$250	Leaving traffic control devices in the right-of-way twenty-four hours after barricading permit expires.
\$250	Failure to comply with the use of the MUTCD and/or NCHRP 350 compliance devices.

PROGRAM REVENUES AND COSTS

Year One Expected Revenues

Elements	Revenues
Permit Fees (3,000 x \$75)	\$225,000
Traffic Control Plans (300 x \$50)	\$15,000
Annual Permit Fees (5 x \$12,000)	\$60,000
Total:	\$300,000

Year 1 Costs

Elements	Costs
Staff and Labor Overhead	\$142,570
Vehicle and Mileage	\$53,290
Office Equipment/ Safety Equipment	\$24,000 107,900
Training Certification/ Memberships	\$520
Public Outreach and Publications	\$20,420
Total	\$348,700



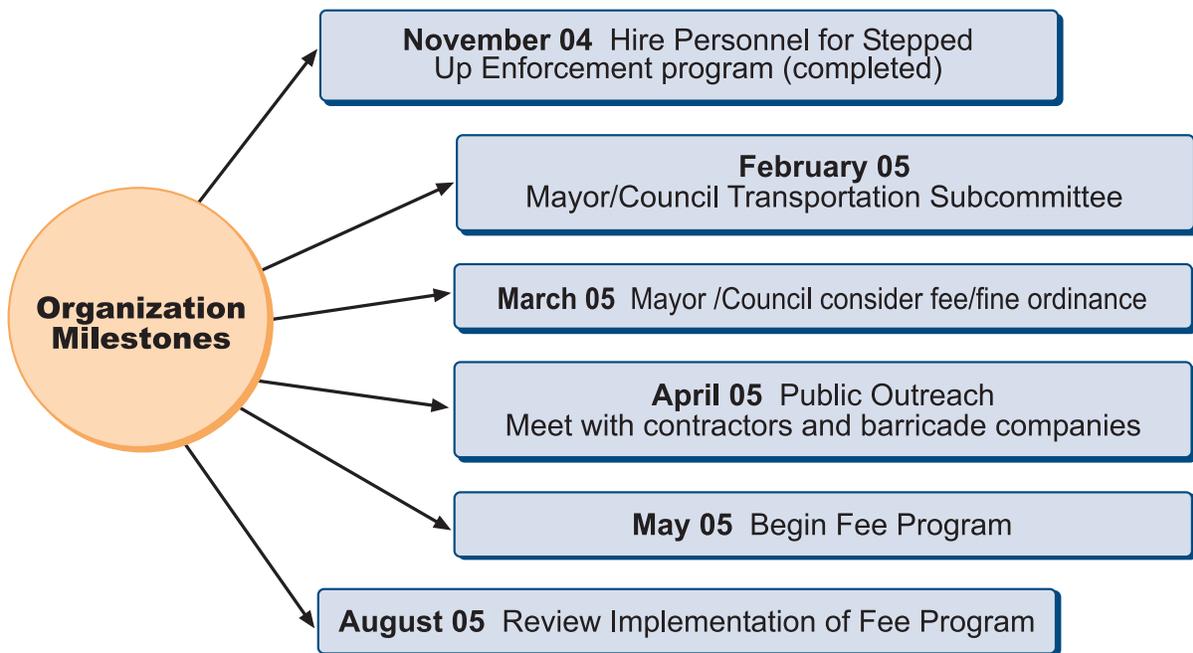


This program will initially cost in the range of \$348,700, with an annual cost of \$207,460. The program has a number of initial start up costs, considering the purchase of vehicles, safety and office equipment, employee training and certification and public outreach. Over a 5 year period this program is expected to cost in the range of \$1,178,540, with an estimated revenue to be approximately \$1,125,000. The programs costs are “fully loaded” considering all the expenses including overhead and the goal of the program is to become “cost neutral” as the program continues past the sixth year.

HOW WILL THIS PROGRAM BE ADMINISTERED?

This program will be administered through the development of a Work Zone Traffic Control Section that will be responsible for issuing permits and expanding the inspection activity of temporary work zones, as well as conducting public information and public outreach programs. The organization will be administered by the Traffic Engineering Division. There will be an extensive outreach process as the program is implemented which will include flyers, training classes, letters, and presentations.

Implementation Schedule





CONCLUSIONS

Work Zone Traffic Control Management is an essential element in providing activities that benefit our community. Well planned and executed projects provide the traffic control installation and maintenance that ensures safe travel for the public as well as a safe working place for the employees. Our street congestion continues to worsen due to the increasing traffic volumes. This congestion situation is greatly exacerbated whenever construction activities are underway restricting the roadway. This management program is intended to continue to facilitate the needed improvements for our growing community public needs and desires while enhancing the planning, application and oversight of the traffic control work zone element.



We can not build our way out of congestion, we must intelligently manage what we have. This technique is our best option.

The *Traffic Management for Temporary Work Zones* is a comprehensive program designed to reduce unnecessary blocking of traffic and improve the safety of work zones by implementing a program that encourages the reduction of lane restrictions, the expansion for inspection of work zones and the expansion of fines for program violations. The program is similar to that used in other cities around the country.



The program will involve setting a system of permit fees and fines for construction and utility activity that encroaches on the public right-of-way. The fees and fines will pay for staff to monitor construction barricading in association with roadway lane restriction fees designed to manage congestion and improve public safety.

The program will be introduced to the contractors, utilities and barricade companies in order to incorporate their operational suggestions before being returned to the Mayor and Council for adoption. Management of the traffic control work zone is a necessary program to provide accurate guidance to the traveling public and a safe work site for the citizens of Tucson throughout our community.





FREQUENTLY ASKED QUESTIONS

1) If I am working on a residential street, do I need a permit?

Yes, a permit is required. A plan may also be required.

2) There is an "Emergency" situation and a utility pole has been knocked over, do I need a permit?

There would not be a fee involved when responding to an "Emergency" situation. However, you would need to contact Traffic Engineering at the earliest convenience to update them on the situation. Traffic Engineering would issue a permit number to record the location of the emergency, to prevent another permit from being issued in the same location.

3) Something was caught in the utility line and it only takes 30 minutes or less to remove the item, do I need a permit?

No permit is required for a job that can be completed in 30 minutes or less. A phone call is not required into the office. If the work last beyond the 30 minute time frame, then a call is required and a permit will be issued for the day.

4) The City is planning to overlay a street and the utility is considering replacing their line at the same time frame, to eliminate an additional cut into the new pavement. Do they need to obtain an additional permit and pay additional fees on top of the City's permit and fees collected, in accordance to the work?

No, the utility would be covered under the City's permit. There would need to be some correspondence between both companies with coordinating the time frame for work to be completed.

5) A contractor is working for a utility company, can they use the utilities general permit?

Yes, they would be able to use the utility company's general permit; however, the contractor may be responsible for a review plan fee if it applies.

6) Is an individual who completes set up and removals of traffic control devices required to be certified via the national or local agency?

Yes, an individual may receive certification through ATSSA (national) or the City of Tucson program (local) prior to setting up or removing traffic control devices on a City Street or right-of-way.





FREQUENTLY ASKED QUESTIONS (CONTINUED)

7) How does impact fees play a part of the fees that I need to pay to Traffic Engineering for a traffic control plan?

All fees from Traffic Engineering for traffic control permits are required payment up front. This includes the permit fee and plan fee. However, the company may be eligible for reimbursement through impact fees when working on an Arterial Roadway, if it applies.

8) Who is eligible for the Annual Public Utility Permit?

Public Utilities that are recognized by the Arizona Corporation Commission are eligible for the Annual Public Utility Permit.

9) If the job is in the county but part of the traffic control is set in the City, do I need to pay any fees?

A permit fee will be required; however, each situation will be reviewed individually to determine if a plan fee applies.

10) When am I required to renew a traffic control permit?

Each permit issued is required a renewal process, if necessary, after 30 days from issuance. The City will be able to determine if there are any unnecessary impacts to the roadway. This is also extremely important with the process for any Capital Improvement Project and coordinating all traffic control with the City's Project Engineer. The Engineer will be required to review each traffic control plan before it is submitted to Traffic Engineering for approval.

