

**WYOMING TECHNOLOGY
TRANSFER CENTER (T²)**

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**WYOMING TECHNOLOGY
TRANSFER CENTER (T²)**
Program Year 2017 – Proposed Activities

1. Introduction

1.1 History and Background

Established in August of 1985, initial funding was provided through a \$150,000 grant from the Federal Highway Administration (FHWA). Since 1987, the Center has been funded by Wyoming State statute. Each year, FHWA contributes 50% of the T² Center funding, while a partnership of Wyoming Cities, Wyoming Counties, the Wyoming Department of Transportation and the University of Wyoming collectively provide the required matching funds. The T² Center is one of 58 Centers which include a program in every state in addition to six Tribal Transportation Assistance Programs and one additional center in Puerto Rico. Over the years, the benefits of this program have been shown to far outweigh the cost.

1.2 Mission and Vision

- **Mission**

The T² mission is to foster a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing knowledge of the transportation workforce and decision makers through training, technical assistance, and technology transfer.

- **Vision**

The T² vision is to be recognized as a premier resource in developing and transferring innovative technologies, proven solutions, and reliable services to successfully address and meet the needs of the transportation community and the driving public in the State of Wyoming.

1.3 Work Plan Organization

This work plan describes how the activities outlined in Section 2.2 below will fulfill the goals of each of the four focus areas: safety, infrastructure management, workforce development, and organizational excellence. Some activities will contribute to the goals of only one focus area, while others may help to fulfill the goals of multiple focus areas.

2. Operations

2.1 Personnel

T² staffing consists of Khaled Ksaibati, Director (50%), Caroline Johnson, Administrative Associate (92%), Bart Evans, Transportation Safety Expert (100%), Trena Terrill, Engineer (100%), Promo Saha, PMS Post Doc (100%), and part-time graduate and undergraduate student employees.

2.2 Activities

Table 1 lists the T² Center's proposed activities for 2017.

Table 1: T² Proposed Activities for 2017

Activity	Proposed Activity
No. 1	Maintain a Mailing List
No. 2	Publish a Newsletter
No. 3	Distribute Technology Transfer Materials
No. 4	Provide an Information Service
No. 5	Provide Training Courses
No. 6	Maintain a Web Site
No. 7	Evaluate the Effectiveness of the Program
No. 8	Participate in Local, State, Regional and National Efforts
No. 9	Update Library

These activities are described in detail in the following sections:

- **Activity No. 1: Maintain a Mailing List**

The current mailing list includes 1,887 individuals, of which 1,625 are in-state and 262 are out-of-state. This list is updated continuously. One first class mailing with return postage prepaid is completed each year to identify needed changes to the mailing list database. In addition, mailing lists are updated with information supplied by local agencies, requests made in the newsletter, and directories of official municipal and county rosters. The Wyoming Transportation Department directory is also used to update the mailing list. Titles and names are cross-checked during the first and second quarters as directories become available.

As developed, the Center has two basic mailing groups. Group 1 consists of the entire T² mailing list which receives the newsletter. Group 2 consists of Wyoming only; this group also receives workshop notices and technical briefs.

- **Activity No. 2: Publish a Newsletter**

The T² Newsletter is designed to focus on Wyoming activities. When possible, it features articles dealing with Wyoming cities and counties, articles from the Wyoming Transportation Department and notices of upcoming workshops. Wyoming's winner of the annual "You Show Us" contest is showcased, along with Wyoming's other contest entries. There is a general emphasis on safety improvement and informing the T² audience of recent changes in guidelines. New additions to the T² library and training materials are highlighted in various editions. All layout and editing of the T² eight-page newsletter is developed solely by the T² staff.

- **Activity No. 3: Distribute Technology Transfer Materials**

All T² materials are classified in five groups: Planning and Administration, Design and Construction, Traffic and Safety, Human Resource Safety, and Maintenance. The entire library is available on-line as a searchable database. Library requests can also be made with a direct link from our database. All individuals have access to the T² Center by phone or the web site.

- **Activity No. 4: Provide an Information Service**

The T² Center provides local agencies with advice and guidance, but does not offer engineering services. Primarily, activities undertaken in this area are in the form of referrals to published materials, target workshops, etc. Requests for information are made during site visits by the Program Director and Transportation Training Coordinator, direct mail and access through the phone line. A major effort undertaken, in addition to developing newsletter articles and evaluating local T² program successes, is to determine problem areas in which T² may be of assistance. This direct link provides the T² Center with a unique opportunity to assist local agencies. The Director's personal library and university library are often utilized for these requests. The availability of the phone service/ web site is advertised in all T² information distributed and at all workshops.

- **Activity No. 5: Provide Training Courses**

The T² Center provides two types of training sessions: statewide and local host. The statewide sessions comprise the majority of the Center's training and are arranged for and presented by the Center, either using the Center's staff or outside experts, or a combination of the two. Local host sessions are arranged by the local agency requesting the training, with the Center providing the presenters. Fewer training sessions are offered during the summer months in order to accommodate construction season.

Sessions are usually presented in conjunction with other organizations, such as the Concrete Association of Wyoming, the Wyoming Department of Environmental Quality (WDEQ), FHWA and WYDOT. The Center has a close working relationship with the Wyoming Association of County Engineers and Road Supervisors (WACERS), and is developing relationships with the Wyoming Association of Municipalities, the Rocky Mountain Chapter of the American Public Works Association, and other state, regional, and national professional organizations. The Center also works with various trade organizations and other members of the private sector in the development and presentation of training sessions.

Training sessions are generally attended by supervisory and technical personnel. These sessions are usually one day long, though they may on occasion be longer. Presentations are given by the Center's staff, WYDOT staff, as well as experts in various fields from across the country.

The Center also participates in the Transportation Learning Network (TLN) to provide training from a distance at several locations throughout the State. This training is done in close cooperation with WYDOT Training staff. National Highway Institute courses provide regional training from Laramie using the TLN.

Sessions planned for 2017 include Local Project Administration (LPA) Certification, Work Zone Traffic Control, ATTSSA Flagger Certification, the 22th Annual Transportation and Safety Congress, Gravel Roads Maintenance, and Concrete. The WYDOT Materials Certification courses will also be offered throughout the year.

Local host sessions are performed upon request from local agencies. Several local agencies have requested the work zone safety and flagger training.

- **Activity No. 6: Maintain a Web Site**

The Center has an internet web site: www.uwyo.edu/wyt2. This web site is being updated continuously in cooperation with a computer specialist. The web site is user-friendly and provides users with the ability to search the library on-line. The web site also includes notices of future workshops, recently acquired library materials, newsletters, certification materials, staff contacts, and links to other resources. This past year we incorporated a new on-line registration process and allowed participants to make on line payments for all workshops and certifications. This on-line registration is updated and maintained during the year.

- **Activity No. 7: Evaluate the Effectiveness of the Program**

Evaluation of the T² program is done on a continuous basis. Evaluation reports are produced for every workshop. In addition, the annual meeting of the

Advisory Committee is utilized to assess the quality of the program. Close working relations have been established with the Wyoming Department of Transportation which also helps in the evaluation process. A major effort of this program task has been and continues to be to develop success stories.

- **Activity No. 8: Participate in Local, State, Regional and National Efforts**

The T² staff members participate in various local, regional, and national efforts to advance transportation knowledge.

- **Activity No 9: Update the Library**

The Library will be updated this year and be maintained to hold up to date information and publication.

2.3 Advisory Board

The Advisory Board members are selected to represent local, state, and federal agencies with interest in insuring the success of the T² program. The following members are currently serving on the board:

- Rob Geringer Engineer, Laramie County Public Works
- Joe Dailey, Division Administrator, FHWA
- Kevin Geis, Campbell County Road and Bridge
- Dave Johnson, Deputy Director, WAM
- Gary Korell, Streets and Sanitation Department Head, City of Torrington
- Timothy McDowell, Programming Engineer, WYDOT
- Dave Pendleton, Superintendent, Fremont County Road and Bridge
- Lee Potter, Assistant Division Administrator, FHWA
- Jeffrey Purdy, Planning and Research Manager, FHWA
- Taylor Rossetti, Local Government Coordinator, WYDOT
- Ken Shultz, Assistant Chief Engineer for Operations, WYDOT
- Mickey Simmons, Public Works Director, City of Lander
- Enid White, Research Manager, WYDOT

3. Four Focus Areas

The eight T² activities were selected to support the following four focus areas: Safety, infrastructural management, workforce development, and organizational excellence. The following sections describe the proposed activities in each one of the four focus areas.

3.1 Safety:

The advisory board of the T² Center emphasized the importance of safety for local governments. Therefore, the center staff members have invested a significant amount

of effort in this focus area. All eight tasks are geared to support safety in the state of Wyoming. The Wyoming T² Center has supported road safety efforts through its existing activities which include: training classes, newsletter publication, information dissemination, and technical assistance.

- The following Safety Training will be presented by the center in 2017:
 - Work Zone Safety
 - ATTSA Flagger Certification
 - 22th Annual Transportation and Safety Congress

- Safety Training Incorporated in Other Training Programs
 - Maintenance of Gravel Roads

- Other Safety Activities
 - The Wyoming Rural Road Safety Program (WRRSP)
The Wyoming T² Center has established the Wyoming Rural Road Safety Program (WRRSP) with support from WYDOT and the FHWA. This program helps local governments in identifying low cost safety improvements on high risk rural roads statewide. In this project, safety techniques and methodologies were developed to identify and then rank high risk locations on all rural roadways in Wyoming. The methodology developed by the center has been approved for implementation.

The T² Center helped more than half of the Wyoming Counties in identifying high-risk safety locations and then selecting low cost safety improvements. The Center has done the benefit cost analysis on all the proposed improvements so that the most cost effective improvements would be selected for funding from the WRRSP. Fourteen counties have already submitted requests for safety funding out of the WRRSP.

The WRRSP funds 90.49% of project cost up to a maximum of \$100,000.00 of federal funds and will require a 9.51% local match. The center will continue to help interested counties in implementing WRRSP.

- The Wyoming Statewide Sign Program
The T² Center, WYDOT, and FHWA initiated a new statewide sign program. This program will provide signs to local governments. The signs will then be installed at high crash locations. The T² Center has been helping to identify locations eligible for signing. Nine counties have participated in the first round of this program. The T² Center has worked out the details for a second round. Twelve counties will participate in this program.

- Speed Limits Study Program
The T² Center developed this program in cooperation with WYDOT to help local governments in conducting speed studies to establish speed limits on local roads. So far, the center has helped nine counties and the Wind River

Indian Reservation in establishing speed limit programs. The center will continue this effort in 2016.

3.2 Infrastructure Management:

Many agencies throughout the United States use highly developed asset management programs. A recent scan report sponsored by the FHWA documents the sophisticated efforts of three local government agencies (LGA) – Hillsborough County, Florida; Kent County, Michigan; and the City of Portland, Oregon – each of which has a population greater than the State of Wyoming. While many Wyoming counties have some sort of asset management system in place, most are very simple. By necessity, these counties need inexpensive analytical procedures to address their most basic funding and budgetary needs.

The T² Center has been helping counties in establishing asset management systems. In addition, training in this important area has been provided by the center staff over the years.

- Infrastructure Management Training
 - Soil Compaction
 - Geotextiles
 - Maintenance of Gravel Roads
 - Concrete
 - AIT Bridges
 - WYDOT Certification Program
 - ✓ Asphalt
 - ✓ Aggregate
 - ✓ Concrete
- Technical Assistance in Infrastructure Management
 - The Center has been assisting counties in implementing asset management systems. This ongoing effort will continue throughout 2017.
- Other Infrastructure-Specific Activities
 - Management of Paved Roads Program

The T² Center has completed a study to address the lack of a widely acceptable methodology for managing local paved roads. This study will provide a template for paved roads asset management systems. By defining critical data and processes, local government agencies and others will have a model upon which they may base their efforts to operate and manage paved road networks. This will both help them save money and provide data-driven decision making capability that will allow the most cost-effective projects and maintenance activities to move forward and receive adequate funding.

The T² Center is working with all 23 counties in the state to continue monitoring local paved roads. The data for this PMS has been collected for half of the counties in the state in 2016 but it will be analyzed in 2017.

3.3 Workforce Development

The T² Center provides training in the workforce development focus area. In addition, the director of the center is a board member of the Transportation Learning Network (TLN). The center worked out an arrangement with WYDOT so that local governments can participate in TLN events at WYDOT district locations.

- Workforce Development Training
 - LPA Certification
 - 22th Annual Transportation and Safety Congress
- Annual Conferences Hosted
 - Annual Transportation and Safety Congress

3.4 Organizational Excellence

The center staff members have been participating in local, regional, and national efforts to advance the transportation knowledge. This section summarizes some of the organizations and groups with which the center is organizing various activities.

- Participation in Organizations at the National, Regional, State and Local Levels
 - National LTAP Association
 - ✓ Safety Group
 - ✓ Executive Committee
 - ✓ Strategic Planning Committee
 - Institute of Transportation Engineers
 - Transportation Research Board
 - Mountains Plain Consortium (MPC)
 - Transportation Learning network (TLN)
 - Wyoming County Commissioners Association (WCCA)
 - Wyoming Department of Transportation (WYDOT)
 - Federal Highway Association (FHWA)
 - Concrete Association of Wyoming (CAW)
 - American pavement Association (ACPA)
 - NACE
 - WACERS
 - APWA Rocky Mountain Division
 - Regional County Road Advisor's Conference
 - WYDOT Safety Management Systems Committee
 - WYDOT Certification Program
 - ✓ Asphalt
 - ✓ Aggregate
 - ✓ Concrete

- Attending Train-the-Trainer Sessions
Center staff members will attend train the trainer sessions as needed.
- Recent Publications/Presentations by Center Employees
 - Terrill, T.; Mashhadi, M.; and Ksaibati, K.; “Developing a Tool to Help Highway Patrol in Allocating Resources to Crashes”; International Journal of Police Science & Management, <http://psm.sagepub.com/cgi/reprint/1461355716665855v1.pdf?ijkey=fzyur5F0waaAzd4&keytype=finite> ; 2016.
 - Svan, C.; Ng, K.; and Ksaibati, K.;" Benefit-Cost Analysis and Application of Intelligent Compaction for Transportation"; Journal of Transportation Geotechnics, 9, pages 57-68, 2016.
 - Hafez, M.; Ksaibati, K.; Anderson-Sprecher, R.;" Utilizing Statistical Techniques in Estimating Uncollected Pavement Condition Data"; ASCE Journal of Transportation Engineering; [http://ascelibrary.org/doi/full/10.1061/\(ASCE\)TE.1943-5436.0000898](http://ascelibrary.org/doi/full/10.1061/(ASCE)TE.1943-5436.0000898); 2016.
 - Offei, E.; Ksaibati, K.; Young, R.; and Apronti, D.;" Evaluating Base Widening Methods"; International Journal of Pavement Engineering, Volume 17, Issue 6, 2016, pp 517-527.
 - Saha, P. and Ksaibati K.;" A Risk Based Optimization Methodology for Pavement management System of County Roads", International Journal of Pavement Engineering; Taylor& Francis; Volume 17, Issue 10, 2016, pp 913-923.
 - Lindsay Schumaker, Mohamed Ahmed, and Khaled Ksaibati, “Policy Consideration for Evaluating the Safety Effectiveness of Passing Lanes on Rural Two-Lane Highways with Lower Traffic Volumes: Wyoming 59 Case Study”. Journal of Transportation Safety & Security, <http://dx.doi.org/10.1080/19439962.2015.1055415>, 2016.
 - Shinstine, D. and Ksaibati, K., “Road Safety Improvement Program on Indian Reservations in North Dakota and South Dakota” Transportation Research Board, Transportation Research Record, Transportation 2015.
 - Shinstine, D.; Denzer, D.; and Ksaibati, K.;"Livability and Transportation on Indian Reservations” Journal of Rural and Community Development, Volume 10, Issue 2, pp 21-34, 2015.

- Center Evaluations
 - Workshop evaluations: They are normally conducted at the end of every workshop.
 - Advisory Boards: Board members are normally informed about the center's various operations and they normally provide feed-back and recommendations for future directions
 - National performance reporting: The Center reports all activities to the FHWA as required. These reports are normally due in January of each year.

- Special Projects
 - As part of the continuous efforts to improve safety in Wyoming, the T² Center has secured funding to hire a traffic engineer to conduct speed studies on rural roadways throughout the state. Guidelines for conducting these studies have been developed in cooperation with WYDOT and FHWA. These guidelines are posted on the Center's website.
 - The Center purchased two retroreflectometers in 2006. One of them has been returned to WYDOT. The second one is being loaned to local governments for their use in evaluating sign sheeting retroreflectivity. Half-day workshops were held to explain the basic principles of retroreflectivity, operation of the retroreflectometer and various approaches to sign management. The Center's loan policy for this program and the agencies taking advantage of this program are shown in Appendix B.
 - Funding has been obtained from WYDOT to establish a traffic counter loan program for counties in Wyoming. The program will provide free traffic counters and training to interested counties. The collected data will be used to populate a statewide traffic database. The counters have been purchased and the loan policy has been developed. The loan policy for this program and the agencies taking advantage of this program are shown in Appendix B.
 - The Center, in cooperation with WYDOT, has implemented a new loan program. WYDOT purchased two Haz-Dust Model EPAM 5000 portable air monitors and made them available to the Center. Under the new program, the Center will provide interested counties with dust monitoring equipment and training on how to use the monitors. The loan policy for this program and the agencies taking advantage of this program are shown in Appendix B.
 - The T² Center has completed a study to evaluate the safety on Wind River Indian Reservations. This study has been expanded to include state roads

on the reservations in 2015 and 2016. The final report for this study has been submitted.

4. Conclusions and Summary

The T² work plan described in this document reflects a significant shift in defining the tasks needed to address four focus areas. The Center has invested significant human resources in the past few years to excel in all focus areas. It is clear from the plan that the Center's staff will continue to provide the services needed to transportation professionals around the state.

5. Budget

The proposed budget summarizes the Technology Transfer Center (T²) is shown in Appendix A. The budget is consistent with the funding and matching requirements in previous years.

Appendix A

**WYOMING TECHNOLOGY TRANSFER CENTER (T²)
Program Year 2016 – Proposed Budget**

	FHWA/ WYDOT	University of Wyoming	Total
Salaries & Fringe Benefits			
Khaled Ksaibati, Director	\$7,000	\$17,360	\$24,360
Full-Time Staff/Staff Assistant	\$85,000		\$85,000
Other Staff Support	\$0	\$0	\$0
Subtotal	\$92,000	\$17,360	\$109,360
Fringe Benefits	\$45,874	\$8,681	\$54,555
Honoraria/Part-Time Consulting	\$2,000		\$2,000
Subtotal Salaries & Fringe	\$139,874	\$26,041	\$165,915
Travel	\$7,570		\$7,570
Other Direct Costs (Newsletter, Training Materials & Supplies, Telephone, Postage)	\$34,848		\$34,848
Total Direct Costs	\$182,292	\$26,041	\$208,333
Indirect Costs (20%)	\$36,458	\$5,209	\$41,667
TOTAL PROGRAM YEAR 2016	\$218,750	\$31,250	\$250,000

Total match required: \$125,000

Match - Wyoming Cities, Wyoming Counties, Wyoming Department of Transportation
and University of Wyoming.

WYOMING TECHNOLOGY TRANSFER CENTER (T²)
Calendar Year 2016 – Proposed Budget

Category	Budget Amount
Salary and Fringe	165,915
Overhead (20% of Direct Costs)	41,667
Supplies & Equipment	34,848
Travel	7,570
TOTAL	\$250,000

Funding Sources	Amount/Budget Totals
FHWA	\$125,000
State Match	31,250
University Match	31,250
Local Match	62,500
Total Program CY 2016	\$250,000
Existing Budget CY 2015	\$250,000
Estimated Carry Over	\$0

Appendix B



Wyoming Technology Transfer Center Sign Retroreflectorometer Loan Program Policies

The Federal Highway Administration is in the process of finalizing new standards and regulations regarding minimum levels of sign retroreflectivity. As a result, agencies will be responsible for maintaining their signs to a minimum level of service. A retroreflectorometer plays a key role to ensure quality and accuracy when implementing an effective sign management program. To help local agencies who are unable to afford or don't warrant enough need to purchase their own meters, the Wyoming Technology Transfer Center purchased two retroreflectorometers and implemented a loan program. These devices were purchased with 402 Funds from the Wyoming Department of Transportation's Highway Safety Office and the Safety Management System Committee.

The retroreflectorometers are DELTA RetroSign® 4500 Retroreflectorometers with GPS capability. Each comes with an extension pole kit to extend the operator's reach an additional nine feet and includes a remote trigger with digital display allowing the operator to take multiple readings without having to retract the pole each time.

Features of the RetroSign® 4500 include:

- High tech filters that accurately measure the retroreflectivity of any color or type of sign sheeting;
- A calibration reflection standard traceable to an accredited national standards laboratory through an ISO 17025 certified testing and calibration laboratory. The instrument is also supplied with a field calibration standard;
- Ability to measure all colors of sheeting accurately after a single initial calibration, recalibration is not necessary for each individual color or type;
- A lens reducer which allows the accurate measurement of smaller letters (15 mm) such as the white letters on a 30" x 18" "Wrong Way" sign;
- A built-in Global Positioning System (GPS) for increased accuracy, and displays specific coordinates where the sign is located, which can then be downloaded into the agency's sign inventory programs;
- Ability to store 1000 measurements which can be downloaded to a spreadsheet or integrated into a sign management program.

The Center will take requests from agencies via phone (800-231-2815), fax (307-766-6784), mail or e-mail (mharman@uwyo.edu), and loan the equipment on a first-come first-served basis. Agencies will be required to provide an estimated length of use (a maximum of two weeks) and schedule a return of the equipment. A waitlist will be maintained and the equipment will be delivered to the next agency on the list upon its return. The Center will host three workshops statewide to provide training for the use of these devices. If an agency was unable to attend one of these workshops, training will be available at the Center. The Center will charge a fee of \$75 to ship or deliver the retroreflectorometer unless the device is picked by your agency from the Center. Each agency is responsible for returning the device to the Center; a late fee of \$25 per day will be assessed if the device is not returned on time. These fees will be used for future maintenance and repair.

The University of Wyoming Property Office will tag the equipment so that it is in their inventory of insured items. In order to be covered by the University's insurance, agencies will be required to maintain the equipment in a secure and locked location during transportation or storage, i.e. locker, trunk or lock box. Because each retroreflectorometer is worth approximately \$15,000, if one is reported lost or stolen, the agency will be required to reimburse the Center a \$2500 fee. The Center will also expect agencies to cover expenses related to obvious physical damage to the equipment.

A copy of the Center's Sign Retroreflectorometer Loan Program Policies will be provided to all borrowing agencies. A signature will be required from the borrowing agency at time of delivery recognizing the Center's expectations for proper use and handling.

Table 1
Retro reflectometer Loan Program Activity

Contact Name	Agency
Bob Kress	City of Cody
Jack Reid	City of Gillette
Gerry Mascarenas	City of Laramie
Gary Butts	City of Powell
Don Hauf	City of Sheridan
Ken Fink	Big Horn County
Pennie Buffington	Fremont County
Scott Elder	Goshen County
Craig Cronk	Johnson County
Ross Turner	Lincoln County
Mike Collier	Park County
Bill Pinkerton	Sheridan County
Ray Shaffer	Hot Springs County
Mike Oakley	Stetson Engineering for Campbell County
Jeff Brown	WYDOT
Jim Sullivan	City of Douglas
Rob Fisher	Albany County
John Smith	Wind River Indian Reservation
Dave Gustafson	Teton County
Chris Chamberlin	LTAP/WYDOT Dust Study



Wyoming Technology Transfer Center Traffic Counter Loan Program Policies

The Wyoming Technology Transfer Center (WYT²) has established a traffic counting program for Wyoming counties. Under this program, the Center will provide interested counties with traffic counters and training on how to use these traffic counters. Currently, if a county wants to perform traffic studies or obtain traffic counts off of the state system, they are limited in their options for the collection of data. By providing the counters through the WYT² Center, the counties will have **free access** to good equipment that will allow them to gather the counts they need. By using the same types of counters throughout the state, the information gathered will be consistent and compatible with WYDOT's new traffic counting software. Counties utilizing the traffic counters will be required to submit the collected data electronically when they return the traffic counters to the Center. These traffic counts will be used to populate a statewide data base.

Responsibilities of the Center

- Provide up to 12 traffic counters to a county for a maximum period of two months
- Provide all materials and software necessary for traffic data collection
- Provide training on how to set up the traffic counter and how to download the data collected
- Consult with the agency and WYDOT to determine the optimum locations for data collection
- Maintain the traffic counters in good working condition

Responsibilities of Counties

- Consult with the Center and WYDOT to determine the optimum locations for data collection
- Fill out a "Request Form" indicating the locations and time frame for data collection
- Pick up the traffic counters from the Center in Laramie
- Download all data collected and share it with the Center
- Return the traffic counters and any extra materials to the Center in Laramie

The Center will take requests from agencies via phone (800-231-2815), fax (307-766-6784), mail or e-mail (mevans2@uwyo.edu), and loan the equipment on a first-come first-served basis. Agencies will be required to provide an estimated length of use (a maximum of two months) and schedule a return of the equipment. A waitlist will be maintained and the counters will be available to the next agency on the list once they have undergone any required maintenance.

A copy of the Center's Traffic Counter Loan Program Policies will be provided to all borrowing agencies. A signature will be required from the borrowing agency at the time the counters are picked up recognizing the Center's expectations for proper use and handling. If a traffic counter is reported lost or stolen, the agency will be required to reimburse the Center for the cost of a replacement.

Received _____ Traffic Counters: _____
Agency Representative



Wyoming Technology Transfer Center Dust Monitoring Equipment Loan Program Policy

The Wyoming Department of Transportation has provided the Wyoming Technology Transfer Center (WYT²) with dust monitoring equipment that will be available to loan to Wyoming counties. Under this new loan program, the Center will provide interested counties with dust monitoring equipment and training on how to use the monitors. These monitors can be used primarily to monitor Congestion Mitigation/Air Quality (CMAQ) project effectiveness. By transferring this equipment to WYT², counties and their qualified contractors will be able to check the equipment out to monitor airborne dust attributed to transportation related sources.

Available for check out are two Haz-Dust Model EPAM 5000 portable air monitors designed to monitor PM₁₀ and PM_{2.5}. The Environmental Particulate Air Monitor is an innovative light scattering nephelometer and filter gravimetric air sampler combined in one portable and compact design. The EPAM 5000 complements both the EPA and OSHA reference methods. This equipment provides a quick way to define problem areas and to pinpoint areas where further study is needed. The EPAM 5000 requires no special skills or tools and can be easily set up in minutes for measuring particulate matter. All real-time data is immediately stored in the instrument's computer memory and can be viewed on the LCD display or downloaded to a PC using the provided statistical software package.



The Center will take requests from agencies via phone (800-231-2815), fax (307-766-6784), mail or e-mail (mevans2@uwyo.edu), and loan the equipment on a first-come first-served basis. Agencies will be required to provide an estimated length of use (a maximum of two weeks) and schedule a return of the equipment. A waitlist will be maintained and the equipment will be available to the next agency on the list.

If a monitor is reported lost or stolen, the borrowing agency will be required to reimburse the Center for the cost of the equipment. The Center will also expect agencies to cover expenses related to obvious physical damage to the equipment.

A copy of the Center's Dust Monitoring Equipment Loan Program Policy will be provided to all borrowing agencies. A signature will be required from the borrowing agency at the time the equipment is picked up recognizing the Center's expectations for proper use and handling.

Agency Representative

Date

Serial No.

Table 2**Traffic Counter Checkout**

Agency	Contact	# Counters
Fremont County	Bill Mason	2
Town of Star Valley Ranch, WY	Warren Webb	4
WY Coop Fish & Wildlife Anna Chalfolm	Kaylan Hubbard	5
Converse County	Scott McWilliams	12
Natrona County	Margaret Teevens	10
Crook County	Dan Blakeman	10
City of Guernsey	Matt Alred	1
Goshen County	Gary Korrel	4
Hot Springs County	Ray Shaffer	6
WYO IT Students for City of Laramie	Dr. Ronda Young	12
WY Coop Fish & Wildlife Anna Chalfolm	Kaylan Hubbard	6
Crook County	Morgan Ellisberry/Ben Weaver	10
City of Gillette	Phillip Griffin/Liz Hunter	10
WYO DEG	Janet Egin	10
Goshen County	Gary Korrel	8
WY Air National Guard	Jason Hamman	5
Institute of Traffic Engineers	Rhonda Young	5
Converse County	Scott McWilliams	6
Goshen County	Gary Korrel	2
Weston County	Ray Pacheco	10
T2 Center	Oil & Gas Study	13
Albany County Road & Bridge	Rob Fisher	2
T2 Center	Oil & Gas Study	16
Carbon County	Bill Nation	2
City of Laramie	Jim Johnson	2
ATMOSCI	Matt Burlehasr	1
WYO IT student for City of Laramie	Dr. Rhonda Young	4
City of Buffalo	Ben Weaver	12
Converse County	Scott McWilliams	7
T2 Center	Jaime Hepner	29
City of Guernsey	Matt Allred	1
Sweetwater County	John Radosevich	10
Grand Teton National Park	Jessica Weinman	2
LTAP/WYDOT Traffic Study	Jaime Hepner	36
Big Horn County	William Bridges	4
Wyo Game & Fish	Amanda Withroder	5
Crook County	Morgan Ellisberry	2

Table 3

Dust Monitor Loan Program Activity

Contact Name	Agency
Matt Allred	City of Guernsey
Amy Buttler	Lincoln County
Chris Chamberlan	UWYO Grad Student