## Example Budget Sheet for a NSF Support Project

Note: Please add 55% overhead charge for the University of Texas at Austin

Last updated: Feburary 9, 2016

### Project description:

A NSF supported project using T-Rex and Instrumentation Van at a site 1000 miles from Austin for seismic prospecting study. (700 miles + 300 miles from site to site (5 sites total))

Step1 Estimated total time needed for the testing			
Estimated time required for testing	30	hours	include shaking + relocating shaker
Realistic estimatimation of required time	60	hours	* 2 for Try out + mistakes + DAQ malfunction + others
Total days of testing	10	days	6 hours of vibration each day
Travel	4	days	4 travel days to and from Austin + 4 * 0.5 days from site to site
weekends	2	days	UT personnel is required to take one day off for every 6 days
Days in the field	16	days	

Step 2: Estimated equipment costs		
T-Rex		
Vibraton	\$1,620	= Vibrator operating time * \$27/hr (fuel cost only)
Tractor-Trailer		
Highway	\$4,260	= 1000 mile * 2 * \$2.13 / mile (\$1.00 overweight permit + \$1.13 fuel)
Fuel-Supply Pickup Truck		(fuel cost only)
Highway	\$900	= 1000 mile * 2 * \$0.45 / mile (fuel cost only)
Recording equipment	\$0	free for NSF supported porject
Instrumentation Trailer	\$0	free for NSF supported porject
Total Equipment Cost:	\$6,780	Account category: Material and supply

Step 3: Estimated travel costs		
Per diem for 3 people	\$6,000	= 3 people * days in the field * \$125 /day / person
Airline tickets	\$500	= 1 person 1 trip
Rental van	\$500	
Equipment breakdown induced travel*		20% of estimated user traveling cost should be prepared in user budget
		NHERI-EF@UTexas can only cover equipment break-down induced travel costs
		of the NHERI-EF@UTexas personnel.
Total Travel	\$7,000	Account category: Travel

Step 4: Estimated other cost		
Material and supply Mobile phone service in the field Site liability insurance**	\$500	no charge for NSF supported project
Total Others	\$500	Account category: Material and supply

## Step 5: Estimated total cost

Total direct cost \$14,280

Indirect cost (55% overhead) \$7,854 Account category: Overhead

**Total Cost** \$22,134

#### Notes:

<sup>\*</sup> NHERI-EF@UTexas vibrators operate with pressures up to 4,000psi, and can output a ground force as high as 60,000 lbs. Components of the vehicle are under high pressure and strong vibration for a long period of time. From time to time, component can fail and field tests will be interrupted. Equipment repairing time ranges from 30 minutes to up to one month at a time. There is a limited amount of budget at NHERI-EF@UTexas to cover travel cost resulting from equipment breakdown and other incidents. However, this is for NHERI-EF@UTexas personnel and equipment only. Users are suggested to add an additional 20% of their traveling cost for unexpected equipment breakdown and other incidents.

<sup>\*\*</sup> Users are required to conduct site survey. If they are required to purchase a site liability insurance policy, it is estimated to be about \$3,000 perproject.

<sup>\*\*\*</sup> Field tests cannot be conducted over national holidays.

# Example Budget Sheet for a non-NSF Support Project

Note: Please add 55% overhead charge for the University of Texas at Austin

Last updated: June 2, 2016

## Project description:

A NSF supported project using T-Rex and Instrumentation Van at a site 1000 miles from Austin for seismic prospecting study. (700 miles + 300 miles from site to site (5 sites total))

Step1 Estimated total time needed for the testing			
Estimated time required for testing	30	hours	include shaking + relocating shaker
Realistic estimatimation of required time	60	hours	* 2 for Try out + mistakes + DAQ malfunction + others
Total days of testing	10	days	6 hours of vibration each day
Travel	4	days	4 travel days to and from Austin + 4 * 0.5 days from site to site
weekends	2	days	UT personnel is required to take one day off for every 6 days
Days in the field	16	days	

Step 2: Estimated equipment costs		
T-Rex		
Vibraton	\$10,200	= Vibrator operating time * \$170/hr
Tractor-Trailer (Big Rig)		
Highway	\$9,580	= 1000 mile * 2 * \$4.79/ mile (\$1.00 overweight permit + \$3.79 per mile)
Fuel-Supply Pickup Truck		
Highway	\$1,260	= 1000 mile * 2 * \$0.63 / mile (fuel cost only)
Recording equipment	\$1,764	= 1 week * \$441 per4-channel per week * 4 (16 channels total)
Instrumentation Trailer	\$267	\$ 267 per project
Total Equipment Cost:	\$23,071	Account category: Material and supply

Step 3: Estimated travel costs			
Per diem for 3 people	\$6,000	= 3 people * days in the field * \$125 /day / person	
Airline tickets	\$500	= 1 person 1 trip	
Rental van	\$500		
Equipment breakdown induced travel*	\$1,400	20% of estimated traveling cost	
Total Travel	\$8,400	Account category: Travel	

Step 4: Estimated other cost		
Material and supply  Mobile phone service in the field	\$500 \$100	
Site liability insurance**	\$3,000	
Total Others	\$3,600	Account category: Material and supply

Step 5: Estimate of personnel cost		
2 Technicia	ins \$33,106	= 2 people *(days in the field + 6 days of preparations) * 11hr/day * \$57/hr./person * 1.2 to account for overtime pay
1 Engine	eer \$25,265	= 1 person *(days in the field + 6 days of preparations) * 11hr/day * \$57/hr./person * 1.2 to account for overtime pay
Total Personi	nel \$58,370	Account category: Salary

### Step 6: Estimated total cost

Total direct cost \$93,441

Indirect cost (55% overhead) \$51,393 Account category: Overhead

Total Cost \$144,834

### Notes:

<sup>\*</sup> NHERI-EF@UTexas vibrators operate with pressures up to 4,000psi, and can output a ground force as high as 60,000 lbs. Components of the vehicle are under high pressure and strong vibration for a long period of time. From time to time, component can fail and field tests will be interrupted. Equipment repairing time ranges from 30 minutes to up to one month at a time. An additional 20% of traveling cost is required for all field personnel for unexpected equipment breakdown and other incidents.

<sup>\*\*</sup> Users are required to conduct site survey . The cost of the site liability insurance is estimated to be \$3,000 per-project.

<sup>\*\*\*</sup> Field test cannot be conducted over national holidays.