The purpose of this document is to provide accountants with the procedure used by NMIMT to develop indirect, or facilities and administrative (F&A), cost rates. This methodology is in compliance with the federal regulations and requirements defined in OMB Circular A-21, Sections E, F, and G.

This document is continually being updated; we would appreciate any information and/or insight that would help us develop stronger policies for NMIMT’s research community.
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I. General

The term facilities and administrative (F&A) costs is synonymous with overhead or indirect costs. The terms will be used interchangeably throughout this document. Indirect costs are those that have been incurred for common or joint objectives and therefore cannot be identified specifically with a particular sponsored project, instructional activity, or other institutional activity (OMB Circular A-21, Section B.4). A negotiated, fixed with carry-forward rate is established through an audit process conducted by Defense Contract Audit Agency (DCAA) on behalf of the New Mexico Institute of Mining and Technology’s (NMIMT) cognizant agency, the Office of Naval Research (ONR). Rates are developed under the requirements of the US Office of Management and Budget’s Circular A-21, “Cost Principles for Educational Institutions.”

Indirect costs are real costs that cannot be easily identified with a specific institute activity or sponsored project but, instead, are incurred through providing resources and support to many or all institute activities. This procedure describes the methodology used by NMIMT to develop indirect cost rates. This methodology is in compliance with the federal regulations and requirements defined in OMB Circular A-21, Sections E, F, and G.

Note: Any references to cost categories, major functions, et cetera are described in greater detail in the F&A Cost Category Manual.

Indirect costs are allocated to NMIMT’s activities in proportions based on the extent to which each activity uses the institute’s infrastructure—this procedure is based on those prescribed in the circular. The purpose of the indirect cost rate analysis process is to establish a rate for allocating such costs to the major functions. The institute establishes separate indirect cost rates for the following categories of NMIMT functions:

- Main Campus
  - On-Campus Sponsored Research
  - Off-Campus Sponsored Research
  - Other Sponsored Activities – On Campus
  - Other Sponsored Activities – Off Campus

- Energetic Materials and Testing Center (EMRTC)
  - On-Campus EMRTC Sponsored Research
  - Off-Campus EMRTC Sponsored Research
  - On-Campus EMRTC Sponsored Activities
  - Off-Campus EMRTC Sponsored Activities

The rate established for each functional area is used to assess indirect costs for individual sponsored projects within that function.
II. Indirect Cost Rate Calculation

The process of calculating indirect (F&A) cost rates is summarized below.

Note: This process is for calculation purposes only, as part of the development of the indirect cost rate proposal. No entries are made to the institute’s accounting system.

The Study, which is based on actual posted values, serves two purposes:

1. It serves as the base year for the proposed rates two years in the future.
2. It is used to determine the carry-forward adjustment by comparing the actual results for the year with the estimated (proposed) rates for the same year.

The Proposal, which is based on an estimate of future expenses and sponsored project activity, serves as a starting point for negotiation for the forward-pricing rate agreement. Assumptions must be properly documented. DCAA does a rate audit before ONR will negotiate the rates. If there is a delay in filing or a delay in the rate audit, ONR can grant provisional rates based on the proposal. ONR will only issue final rates after DCAA provides them with the results of the rate audit.

Due to time constraints, a pre-audit trial balance is used to prepare the Study and Proposal. The Study (based on the most recently closed fiscal year) is due by 31 December of the fiscal year in process, while the forward-priced Proposal is due by 31 January of the fiscal year in process (estimated for the fiscal year two years advanced from the year of the Study). For example, the Study for fiscal year 2011 is due 31 December 2011, while the Proposal for fiscal year 2013 is due 31 January 2012.

Because the institute is not permitted to release the financial statements until they are approved at the state level, the audit, preparation, and approval of the Financial Statement for the year reflected in the study are not available in time to use. Any material changes that arise between the pre-audit trial balance and the audited Financial Statements for the year of the study are reflected in the subsequent carry-forward adjustment to the fixed rates.
A. Cost Categories – Main Campus

A cost category is assigned to each specific institute function or activity for which costs are accumulated. See F&A Cost Category Manual. Direct cost categories are cost pools that directly support one or more of the institute’s primary functions (instruction, organized research, other sponsored activity, and other institute activity). Conversely, indirect cost categories provide indirect support to these functions. The latter accumulate costs in pools on an intermediate basis in the calculation process—these costs are then allocated to the appropriate direct cost categories. (See Figure 4 and Figure 5.) Cost categories with common functional purposes and objectives are grouped together. Cost categories at NMIMT are categorized as follows:

**Note:** The cost category codes discussed in the manual will be shown in green if an F&A cost pool and in red if one of the “benefiting functions” (also known as major functions) that become either one of the F&A rates applied to sponsored projects or a function that receives a portion of F&A costs that the government does not reimburse.

a. Major Functions (Direct Cost Pools)
   - Instruction (including Departmental Research) (IN)
   - Organized Research (Sponsored and University Research) (SR)
   - Other Sponsored Activities (SO)
   - Other Institute Activities (OA)

b. Indirect Cost Pools
   - Building Depreciation (space study)
   - Equipment Depreciation (space study)
   - Operation and Maintenance (OM)
   - General and Administration (GA)
   - Library (LI)
   - Departmental Administration (DA)
   - Sponsored Programs Administration (SP)
   - Student Services Administration (not currently used) (SS)

B. Cost Categories – EMRTC

a. Major Functions (Direct Cost Pools)
   - Sponsored Research (SR)
   - Other Sponsored Activities (SO)
   - Other Institute Activities (OA)

b. Indirect Cost Pools
   - Building Depreciation (space study)
   - Equipment Depreciation (space study)
   - Operation and Maintenance (OM)
C. Allowable Costs

Only allowable costs, as defined by federal regulations, are accumulated in indirect cost pools. For detailed coverage on allowable or unallowable costs, see OMB Circular A-21, Section J.

D. Allocation of Indirect Costs

Amounts in indirect cost pools are fully allocated to the direct cost functions at fiscal yearend. The purpose of the allocation process is to allocate indirect costs to the major institute functions in proportion to their usage of the institute’s resources.

Note: In this process, indirect costs are for calculation purposes only, as part of the development of the indirect cost rate proposal. No alterations are made to the institute’s accounting system.

a. Allocable Cost

A cost is allocable to a cost function if the goods or services involved directly benefit that cost function.

b. Allocation Base

A common measurable base is used to allocate the amounts in each indirect cost pool to other cost functions. The allocation base appropriate for each indirect cost pool is selected to ensure an equitable distribution in accordance with OMB Circular A-21 guidelines. An example is the allocation of Operation and Maintenance (OM) costs on the basis of square feet of space used by each cost category. The allocation base used by NMIMT to allocate each indirect cost pool is described in Section IV. of this document.

E. Calculation of Indirect Cost Rates

After indirect costs have been allocated to the primary functions, a mechanism for charging indirect costs to individual sponsored projects is needed. For this purpose, a rate is computed for each primary institute function to which indirect costs are assessed. The rate is derived from the process of converting a fraction to a percentage. In simplified terms, the components of the fraction are as follows:

- The numerator is the total dollar amount of allowable indirect costs allocated to that direct cost category.
- The denominator is the total dollar amount of allowable direct costs of that direct cost category.

The actual calculation process, outlined in Section VI. herein, is considerably more complex.
F. Proposal and Negotiation

The calculated indirect cost rates are presented in the form of a proposal. The indirect cost rate proposal is prepared by the NMIMT’s Cost Accounting Office (CAO) at required intervals. The proposal, including certifications signed by the Vice President for Administration and Finance, is submitted by the CAO to the cognizant federal agency, which may subsequently audit the proposal and supporting documentation. Finally, the actual rates to be used are negotiated by the CAO (under the oversight of the Director of Sponsored Projects and the Vice President of Administration and Finance) and federal representatives.
### III. Required Data

Because required indirect cost pools do not coincide with the standard institute expenditure categories, cost analysis and regrouping are required. Various data are required for this cost analysis.

#### A. Modified Total Direct Costs

The modified total direct costs (MTDCs) of each cost function must be computed. The MTDCs, as defined by federal regulations, consist of the following cost items:

- Salaries and wages
- Fringe benefits
- Materials and supplies
- Services
- Travel
- Subcontracts up to $25,000 each

A cost function's MTDC is determined as follows:

**Total Direct Costs**

\[
\text{Less Exclusions:}
\]

- Cost of capital equipment
- Subcontract costs which exceed $25,000
- Stipends

\[
\text{Plus Mandatory cost sharing}
\]

\[
= \text{Modified Total Direct Costs}
\]

##### a. Net Cost

Only net costs, as defined by federal regulations, may be considered when computing MTDCs, as well as in computing the cost of capital items. Net costs are determined by:

- Excluding any capital expenditures made from federal funds and
- Applying any credits, such as discounts or refunds, that offset or reduce expenditures.

##### b. Classified Expenditure Summary

The Classified Expenditure Summary report is generated using the pre-audit trial balance. This should tie to auditor’s working papers and Statement of Revenues, Expenses, and Changes in Net Assets for the fiscal year once financial statements are released.
The Office of Management and Budget’s Circular A-21, Section A.3.a does not allow loans, scholarships, fellowships, tuition rates, or fees to be categorized in sponsored agreements. These—as well as expenditures recovered by other means, such as service centers or transfers that would have the effect of duplicating expenditures in other areas of the study—are excluded at the account or fund level.

For each unrestricted fund included in the study, the Executive Summary allocates MTDCs to the various institute functions (MTDC tab) and also provides the following information:

- Total direct costs
- Adjustments to total direct costs (such as Personnel Activity Report [or effort] changes or voluntary uncommitted cost sharing)
- Exclusions
- Modified total direct costs

**Departmental Administration Allowance**

The MTDCs associated with faculty salaries and benefits in the instructional departments are allocated to administrative functions using the Direct Cost Equivalent formulas. These formulas must be approved by the cognizant audit agency. Currently, NMIMT uses a worksheet tab titled IND DA in place of the Direct Cost Equivalent (DCE) formula. See Figure 2 and Figure 3 herein.

c. **Cost Sharing**

Mandatory cost sharing associated with sponsored projects must be identified for each fiscal year on a project-by-project basis. **Effort cannot be excluded from the organized research base by declaring it to be voluntary uncommitted cost share (VUCS).** If a research program shows no faculty (or senior researcher) effort, paid or unpaid by the federal government, an estimated amount must be computed by the university and included in the organized research base. The RFD Financial Administrator is required to e-mail a ”memo entry” to the CAO to address the allocability issue referenced in OMB Circular A-21’s clarification memo M-01-06. The CAO must add the amount identified in the memo entry to the related base component. For more details, see Cost Share Policy and Tracking Effort on Sponsored Projects.

d. **Personnel Activity Reports (PARs)**

The Office of Management and Budget’s Circular A-21, Section J.10.C.(2) prescribes required substantiation and documentation of after-the-fact direct and indirect (via overhead rate) payroll costs charged to federal grants and contracts. The Personnel Activity Report (PAR) is used as a tool to monitor whether functions of various funds have deviated from their originally intended (and coded) purposes. Adjustments to PARs require adjustments to the related cost pool or base functions. For more details, see Personnel Activity Report (PAR) Instructions.
B. Space Usage
One allocation base used in allocating indirect costs is the number of square feet of institute building space used by each cost category. The CAO maintains a space usage survey to capture the use of institute building space on a room-by-room basis. At regular intervals, survey forms are sent to departmental administrators for completion. Using the completed survey forms, the CAO computes the amount of net assignable square (NASF) used by each department and cost category for each institute building individually, as well as in total.

For more details, see Space Survey Instructions, Space Cost Category Definitions or Space Study Flowchart.
IV. Indirect Cost Pools and Allocation Bases

Costs accumulated in each indirect cost pool are described in this section. In addition, the allocation base used to allocate costs from each pool is identified.

A. Depreciation Expense

The institute is compensated using a straight-line basis (according to the results of the space study performed every other year) for providing buildings and equipment for use by sponsored projects over useful life of the asset.

a. Buildings and Capital Improvements to Land and Buildings

The institute’s General Accounting Office (GAO) maintains cost records for each institute building, including the total cost of buildings and fixed equipment as well as capital improvements to land and buildings. Using these data, depreciation is calculated by the CAO and allocated to each applicable cost category as of the end of each fiscal year (Bldg and BLDG ALLOW tabs on the worksheet) by the following means:

1. Allocating (by cost category and based on the NASF in that building) the net cost (excluding costs paid by federal funds) of each building, equipment and capital improvements to land and buildings as of the beginning of the fiscal year provided they are used, needed and properly allocable to the benefiting functions.
2. Totaling the net cost of all buildings and improvements, as of the beginning of the fiscal year, allocated to each cost category.
3. Allocating, by cost category, the net cost of additions to buildings and improvements incurred during the fiscal year, based on the percent of square feet used in each addition.
4. Totaling the net cost of all additions to buildings allocated to each cost category.
5. Calculating the depreciation expense for each cost category, as follows:
   (a) A forty-year useful life is used by the CAO for F&A recovery purposes.
   (b) A thirty-year useful life is used by the GAO for financial statement purposes. Once ONR approves the institute’s request for a cost accounting change from use allowance to depreciation, a request to change the useful life of the financial statement to a forty-year life will be made to the Board of Regents and the State of New Mexico. The goal is to achieve synergy between F&A and financial statement reporting.
b. **Equipment Depreciation**
The Property Office (PO) maintains cost records on each piece of movable equipment. In accordance with state regulations, the institute maintains records for tangible inventoriable property with unit costs greater than $1,000 but less than $5,000. Inventoriable property is not subject to depreciation. The PO also keeps cost records on each piece of movable equipment costing $5,000 or more. An annual depreciation amount is computed for each equipment item using “useful life” periods of either five or twelve years on a straight-line basis. Equipment depreciation is allocated to cost categories using square feet of space (Equip and EQP ALLOW tabs). Equipment donated or purchased with federal funds is excluded from F&A cost recovery.

c. **Calculation of Space**

**Building Within Department** [B WI D (equip) tab]
The purpose of the schedule is to identify the various buildings assigned to the different departments and determine the use of each space as defined in Space Cost Category Definitions. The results are used to allocate equipment (EQP ALLOC tab).

**Jointly Used Space** [B WI D (equip) tab]
In instances where space is used jointly by more than one function, the space is allocated to benefiting functions on the basis of institution-wide employee salaries and wages applicable to the benefiting major functions (in accordance with OMB Circular A-21, Section F.2.b.(3)). The allocation percentages are derived from a pivot of pre-audit trial-balance institute-wide salaries and wages (see Figure 1).

**Department Within Building** [D WI B (bldg) tab]
The purpose of this schedule is to identify departments within different buildings. This schedule represents a type different than the schedules contained in “Building Within Department,” above. However, this report does show total square footage by building and clearly ties into the total square footage by building used in the schedule entitled, “Building Cost Allocation.” The results are used for building allocation (BLDG ALLOC tab) and operation and maintenance (OM SPACE tab) allocation.
<table>
<thead>
<tr>
<th>Cost Category Key</th>
<th>Institute-wide Salaries &amp; Wages</th>
<th>Department: 25000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL CAMPUS</strong></td>
<td></td>
<td>VP of Academic Affairs</td>
</tr>
<tr>
<td><strong>INSTRUCTION &amp; DEPT RESEARCH IN</strong></td>
<td>11,408,179.95</td>
<td>20.62%</td>
</tr>
<tr>
<td><strong>SPONSORED RESEARCH SR</strong></td>
<td>14,402,352.85</td>
<td>26.03%</td>
</tr>
<tr>
<td><strong>LIBRARY LI</strong></td>
<td>420,973.45</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>OPERATION &amp; MAINTENANCE OM</strong></td>
<td>3,414,322.03</td>
<td>6.17%</td>
</tr>
<tr>
<td><strong>RESEARCH ADMINISTRATION SP</strong></td>
<td>468,993.34</td>
<td>0.85%</td>
</tr>
<tr>
<td><strong>OTHER INSTITUTE ACTIVITY OA</strong></td>
<td>7,921,077.00</td>
<td>14.32%</td>
</tr>
<tr>
<td><strong>EXCLUDED EX</strong></td>
<td>7,570,523.92</td>
<td>13.69%</td>
</tr>
<tr>
<td><strong>TOTAL Salaries</strong></td>
<td>55,319,420.34</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Figure 1. Joint-Use Space**

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B. Operation and Maintenance Expenses (OM)

Included in this pool are the net costs of operating and maintaining the institute's physical plant. Operation and maintenance costs include, but are not limited to, expenses incurred for janitorial service; grounds maintenance; campus security; property insurance; repairs to buildings, equipment, and vehicles; utilities; rent; and Facilities Management administration. These costs are allocated to the applicable cost categories on the basis of total square feet of space used.

The purpose of the OM tab is to arrive at the OM cost per square footage for areas of main campus support. The first step is to distribute physical plant administrative costs to all physical plant cost centers (column b within the OM tab). The second step is to allocate building and equipment usage allowance to OM (column c). The total allocated costs to OM are then applied to a specific area (column d). The rates are then applied to the benefiting areas.

C. Administrative Costs

Administrative costs are segregated into three groups: general administration expenses, departmental administration expenses, and sponsored projects administration expenses. In the future, we may add student services administration expenses.

a. General Administrative (GA) Expenses

General administrative expenses are those that have been incurred for the general executive and administrative offices of the institute as well as those expenses of a general nature that do not relate solely to any major institute function. These costs include, but are not limited to, expenses incurred by the President’s Office, the Vice President for Administration and Finance, General Accounting, Payroll, Human Resources, Affirmative Action, and the Post Office. Currently, the expenses of NMIMT’s Board of Regents are not included, but could be in the future. The GA expense category includes the allocated amounts for fringe benefits, depreciation or use allowance, and operation and maintenance expenses. General administrative expenses are allocated to F&A cost pools on the basis of modified total cost (MTC).

The purpose of the GA tab is to allocate GA expenses to benefiting functions as follows:

1. General administrative expense numerator costs (MTCs) are allocated between Main Campus and EMRTC based on their respective MTDC bases, except in those cases where it is possible to determine a different ratio, as in the case of Payroll and Human Resources or for those areas that only benefit main campus (e.g., Research and Economic Development funds). The reconciled trial balance amounts are used as input into the MTDC schedule.
2. For each location (Main Campus and EMRTC), GA costs (MTCs) are allocated to each remaining applicable cost category on the basis of each category’s MTDC. For each location, the MTDC for each cost category is expressed as a percentage of the MTDC for all cost categories, and that percentage is applied to that location’s total GA cost pool as determined by the MTDC schedule.
b. **Departmental Administration (DA) Expenses**

Included in this pool are administrative expenses incurred for support services that benefit common or joint departmental activities or objectives in academic deans’ offices, academic departments and divisions, and organized research units. These costs include, but are not limited to, expenses incurred by the following entities:

- The Office of Academic Affairs (excluding non-administrative activity),
- Departmental chairpersons and their staff (excluding non-administrative faculty or staff costs),
- Research Center Administration (including secretarial and clerical staffs, administrative officers, and assistants),
- Other administrative and supporting expenses such as travel, office supplies, stockrooms, and the like, and
- Grant and contract proposal preparation for the solicitation of outside sponsors.

**Calculations performed in the IND DA tab**

Salaries and fringe benefits attributable to the administrative work (including bid and proposal preparation) of faculty and other professional personnel conducting research (including department heads) and/or instruction, is allowed at 3.6% of MTDC. The amount of such faculty salary/benefit expense is determined by the Direct Cost Equivalent (DCE) formulas (OMB Circular A-21, Section F.6.a.(2).(a)).

Currently, for academic departments, the DCE calculation is figured by multiplying 3.6% by the academic department’s MTDC and subtracting the result from the amount of faculty salary charged to instruction within that department. See Figure 2.

For research centers, the calculation is figured by multiplying 3.6% by the research center’s or independent operation’s MTDC and subtracting the result from the amount of professional salary charged to Other Institute Activity within the center. See Figure 3. However, if the research center sets up a fund or group of funds in order to direct charge bid and proposal work by payroll allocation, then no change is made in the IND DA tab.

The MTDCs of departmental administration are allocated to applicable cost function categories, department-by-department, on the basis of the MTDC allocation of the direct cost function categories.
Additionally, a second calculation is figured within the tables shown in the figures above. The purpose of this calculation is to reduce the department administration component by the amount of salary, wages, and fringe benefits for secretarial and clerical staffs charged directly to grants and contracts. This adjustment is made through an adjustment to the Instruction function in the case of academic departments (or the Other Institute Activity function in the case of research centers). The actual activities direct charged are not the same as the actual activities normally included in the institution’s F&A cost pools. The adjustment is made for consistent treatment as required in OMB Circular A-21, Section F.6.a.(2).b.
### Figure 2. IND DA tab – academic departments

References A–E reflect figures derived from the institute’s accounting system.

References X–Z reflect adjustments for F&A purposes that do not result in entries into the institute’s accounting system.

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## FY08/10

**BUREAU OF GEOLOGY**

### MTDC -

<table>
<thead>
<tr>
<th>Appropriated</th>
<th>Research</th>
<th>OSA</th>
<th>Instruction</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>MTDC BREAKDOWN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>5,591,219</td>
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### COMPUTATIONS -

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<tr>
<th>Non-Grant Dept. Salary</th>
<th>Dept Admin</th>
<th>Other</th>
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<tbody>
<tr>
<td>Professional (SF+SP)</td>
<td>2,214,681</td>
<td>2,013,397</td>
</tr>
<tr>
<td>Grad Student (SG)</td>
<td>53,690</td>
<td>53,690</td>
</tr>
<tr>
<td>Secret/Cl (SS)</td>
<td>165,329</td>
<td>165,329</td>
</tr>
<tr>
<td>Other (ST)</td>
<td>293,293</td>
<td>293,293</td>
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</table>

**SUBTOTAL**

2,726,993 366,613 2,360,379

**PLUS F/B @ 0.335955**

916,148 155,543 860,605

**TOTAL DEPARTMENT**

3,643,141 422,156 3,220,984

**PERCENTAGE OF TOTAL**

100.00% 11.59% 88.41%

**OTHER MTDC**

373,698 43,303 330,395

**TOTAL APPROPRIATED**

A 4,016,838 B 465,459 C 3,551,379

**G&C SEC/CLERICAL S/W + FB**

X DIR SEC/CLER S/W = 2.26

Adjusted Sec/Cler S/W + FB @ .335955 = 6,528

**TOTAL S/C TO APP OTH = 8,721**

### ALLOCATIONS -

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<tr>
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<th>Other</th>
<th>Research</th>
<th>OSA</th>
<th>Instruction</th>
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</tr>
</thead>
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<td><strong>MTDC BASE -</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>465,459</td>
<td>3,551,379</td>
<td>B 849,924</td>
<td>C 724,457</td>
<td>D 0</td>
<td>5,591,219</td>
</tr>
</tbody>
</table>

| TOT S/C TO APP RES/OSA |          |          |     |             |       |
| 8,721 | 8,721 | 0 |

| ADJUSTED BASE - |          |          |     |             |       |
| 456,739 | 3,560,099 | 849,924 | 724,457 | 0 | 5,591,219 |

| MTDC H286 |          |          |     |             |       |
| 3,560,099 | 849,924 | 724,457 | 0 | 5,134,480 |

**BASE % OF TOTAL**

69.34% 16.55% 14.11% 0.00% 100.00%

**DA B183**

Figure 3. IND DA tab – independent operation/research centers

References A–E reflect figures derived from the institute’s accounting system.

References X–Z reflect adjustments made for F&A purposes that do not result in entries into the institute’s accounting system.

**Independent Operations/Research Centers reduce Other Institute Activities for the DA component/adjustment.**

**APPROPRIATED (MTDC tab)**

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</tr>
<tr>
<td>Research</td>
<td>3,986</td>
</tr>
<tr>
<td>Oth Spon Act</td>
<td>0</td>
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</tbody>
</table>

<table>
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| 0 |

**G&C Sec/Cl - OR**

| 0 |

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**G&C Sec/Cl - SS**

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**G&C Sec/Cl - SF + SP**

| 2.147 |

**G&C SALARY**

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**NMIMT Administration and Finance || Sponsored Project Administration**

Page 19 of 33
Calculations performed in the DA tab

The purpose of this schedule is to identify incurred expenses for administrative and supporting services that benefit common or joint departmental activities or objectives. In addition, each academic department is allocated its share of the academic dean’s expenses attributable to administrative functions on the basis of MTDC. Also, the salaries and fringe benefits attributable to the administrative work (including bid and proposal preparation) of faculty (including department heads) and other professional personnel conducting research and/or instruction calculated in the IND DA tab are brought forward to the DA tab. This allowance is added to the computation of the indirect cost rate for major functions (evident on “stepdown” schedule) and is excluded from the DA cost pool (see department administration – individual worksheets). Cross allocations to DA include building and usage allowance, OM, and GA.

The first step on the DA tab worksheet is to identify the building and equipment usage cost from DA. The cost per square foot is determined by dividing the building’s total allocation by that building’s total square footage. This rate is then applied to the square footage assigned to a given department’s DA.

The second step is to examine the department’s MTDC for DA (off the MTDC schedule) and add OM, GA, and equipment and building allowances for a new DA expense total for that particular department.

The third step is to allocate to each department its share of Graduate Dean and Academic Affairs Department on the basis of each department’s unrestricted and restricted MTDCs. Add to this distributed amount the department’s administrative costs plus its share of OM, GA, and equipment and building allowances. This gives us a new DA total for each department, which now must be allocated to the functions of Instruction, Research and Other Sponsored Activities. The rates used to allocate to each of these functions are calculated previously on the IDA DA tab.

c. Sponsored Programs Administration Expenses

Included in this pool are expenses incurred in support of campus-wide sponsored programs. These expenses include administrative expenses, such as salary and wages, fringe benefits, materials, and supplies incurred by the Office of the Vice President of Research and Economic Development (R&ED) and the Restricted Funds Department (RFD). No R&ED expenses are allocated to EMRTC because EMRTC does not benefit from R&ED.

The first step on the RA tab schedule is to identify the MTDCs associated with RFD and R&ED. Add to each of those costs the applicable amounts of building/equipment depreciation, OM, and GA. The results are allocated to applicable cost functions categories on the basis of the MTDC allocation of the appropriate direct cost categories.
D. Library Expenses

Included in this pool are expenses incurred for the operation of the institute library, including the cost of books and library materials. Modified total direct library costs are apportioned on the basis of the population of library users (Lib tab). The expenses are allocated first on the basis of primary categories of users: student, professional employees, and other.

The student category consists of full-time equivalent (FTE) students enrolled at the institution, regardless of whether they earn credits toward a degree or certificate. The Registrar’s Office provides the NM Commission of Higher Education Registrar’s report for the end of the prior calendar year’s summer and fall sessions and the spring semester of the current calendar year. The FTEs are calculated in a spreadsheet titled, “FTEs_Lib_Tab.xls.”

The professional employee category consists of all faculty members, graduate students under contract, and other professional employees of the institution. Staff FTEs can be gathered by performing a total hour calculation (from the NHI database in Banner) by professional and graduate student, and then dividing by an average year of 2080 hours.

Note: The other users category is not used because NMIMT’s library draws little interest from the Socorro community.

The amount allocated is assigned further, as follows:

1. The amount in the student category is assigned to the Instruction function of the institute.
2. The amount in the professional employee category is assigned to the major functions of the institution in proportion to the salaries and wages of all faculty members, graduate students under contract, and other professional employees of the institution applicable to those functions.

E. Student Services Administration Expenses

Although these expenses are not currently tracked as a cost pool, future rate proposals may require this pool’s use. Included in this category are expenses incurred for the administration of student affairs and for services to students outside the classroom. These expenses include, but are not limited to, costs incurred by the following entities:

- Office of the Vice President for Student Affairs,
- Dean of Students,
- Admissions Office,
- Registrar,
- Student Financial Aid Office,
- Career Services,
- Student Health Center,
- A portion of Bursar’s Office, and
- Branches (student services administration expenses).
Modified total direct costs of student services administration may be allocated to the applicable cost categories on the basis of student credit hours. Currently, these costs are coded and charged to Other Institute Activity (OA).
V. The Step-Down Allocation Process

Indirect cost pools are allocated to direct cost categories and other indirect cost pools as described below. Each indirect cost pool is fully allocated. Indirect costs are allocated only to cost function categories which benefit from the resources provided by the indirect cost pool.

A. Allocation of Indirect Cost Pools to Cost Function Categories

Indirect cost pools are allocated to the Main Campus and EMRTC cost function categories as indicated in Figure 4 and Figure 5.

B. Order of Distribution

Indirect cost pools are allocated in the following sequence:

1. Building Usage Allowance
2. Equipment Usage Allowance
3. Operation and Maintenance Expenses
4. General Administrative Expenses
5. Library Expenses
6. Departmental Administration Expenses
7. Sponsored Programs Administration Expenses (Research Admin.)
8. Student Services Administration Expenses

Note: The Student Services Administration Expenses cost pool is not currently in use, but may be required for future proposals. Currently, costs included in this pool are charged to Other Institute Activity (OA).
### C. Allocation of Indirect Cost Pools to Cost Categories

**Note:** Dollar amounts are in thousands

<table>
<thead>
<tr>
<th>Step Down</th>
<th>Dist Base</th>
<th>Amount to Allocate</th>
<th>Oper &amp; Maint</th>
<th>General Admin</th>
<th>Library</th>
<th>Dept Admin</th>
<th>Research Admin</th>
<th>Org. Research</th>
<th>Other Sponsored Activity</th>
<th>Instruction</th>
<th>Other Institute Activity</th>
<th>EMRTC</th>
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**Figure 4. NMIMT Main Campus Step-Down Allocation**

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<th>Org. Research</th>
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<th>Instruction</th>
<th>Other Institute Activity</th>
<th>EMRTC</th>
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| **NUMERATOR - CROSS ALLOCATIONS** | | | | | | | | | | | | |
| **ALLOCATED-TO FUNCTIONS** | | | | | | | | | | | | |

**Figure 5. NMIMT EMRTC Step-Down**
VI. Determining Proposed Indirect Cost Rates

An indirect cost rate is determined for each functional area for which a rate is needed (identified in Section I. herein). This section describes this process.

An indirect cost rate is calculated for each indirect cost component allocated to each of the primary functional areas (Summary tab). The rate is produced from the conversion of a fraction to a percentage. The components of the fraction are as follows:

- The numerator is the total dollar amount of indirect costs allocated to that direct cost function category.
- The denominator is the total dollar amount of the appropriate MTDC of that direct cost function category.

Determine the appropriate MTDCs to be included in the base (denominator) by pairing each rate component (numerator) with the appropriate MTDC base for that function, as shown in the following table.

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<th>Rate Component/Numerator</th>
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<td>Equipment Usage Allowance</td>
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<td>Library</td>
<td>On Campus Only</td>
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<td>Departmental Administration</td>
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<tr>
<td>Sponsored Projects Administration</td>
<td>On and Off Campus</td>
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</table>

For each primary functional area, total the percentages computed above. The total is the proposed indirect cost rate for that functional area.

Percentages for the following components are excluded from the total rate for Off-Campus activities:

- Building Usage Allowance
- Equipment Usage Allowance
- Operation and Maintenance Expenses
- Library Costs
The administrative portion of indirect cost rates cannot exceed 26% of MTDCs. The administrative portion includes General and Administrative, Sponsored Programs Administration, and Departmental Administration cost components.
VII. Indirect Cost Rate for EMRTC

The indirect cost rate for EMRTC is developed in the same manner as Main Campus, but the costs are specific to EMRTC.
VIII. Developing Carry-forward (CFW) Computations

This computation is developed concurrently with the actual study. It is not changed for the forward proposal, but is included in the proposal paperwork. The CFW worksheet provides an estimate of the final CFW adjustment, as determined by the DCAA Compliance Audit, which determines the final CFW amount.

(Over) or under recovery is determined by multiplying the negotiated capped fixed rate for a given fiscal year by the claimed actual base for the same fiscal, and then reversing the CFW (over) or under recovery from the rate agreement for the same fiscal year. This process provides the fiscal year Calculated Recovery.

Next, multiply the claimed actual fiscal year rates (before CFW, but after the Admin CAP adjustment defined in OMB Circular A-21) by the claimed fiscal year Actual Base to yield the Claimed Actual Fiscal Year Costs. The difference between these two amounts equals the (over) or under recovery.

A large CFW adjustment can be the result of bad forecasting, a sudden and unexpected change in the research base (denominator) or in the cost pools (numerator) due to economic trends, or a change in accounting treatment. Usually, it is the result of a combination of events, the most influential being a change in the denominator.
IX. Internal Review Process

Before proposed indirect cost rates are submitted to the federal government, a final review is required. The final review of the indirect cost rate analysis includes the following actions:

- Verify data and calculations.
- Verify that unallowable charges have been excluded.
- Reconcile schedules and spreadsheets with pre-audit trial balance or audited financial statements (if available prior to deadline for submittal).
- Check details in individual accounts.
- Test for reasonableness.
- Compare the results the prior year's and analyze any major variations. Prepare a written justification for any increase greater than 10% in any rate component of ten points or more.
- Maintain audit trails and keep complete work papers.
X. Certification of Proposed Indirect Cost Rates

Each proposal to establish indirect cost rates must be certified using the Certificate of Indirect Costs format in OMB Circular A-21, Section K.(2).(b). The Vice President for Administration and Finance signs the Certificate on behalf of the institute, certifying that all costs included in the proposed rates are allowable and properly allocable to federally sponsored agreements.
XI. Negotiation of Indirect Cost Rates

Final indirect cost rates are negotiated with representatives of the Office of Naval Research (ONR) after the Defense Contract Audit Agency (DCAA) performs a Forward Pricing Rate Agreement Audit. A set of rates is negotiated for a future year or period based on the indirect rate analysis conducted with data from the most recent complete fiscal year. The DCAA also performs an Incurred Cost Audit for CFW determination. This audit compares the actual results of a given year with the proposed and negotiated fixed rates for the same year. The DCAA sometimes refers to this comparison as the Incurred Cost Electronic (ICE) audit. The results of such negotiations are reflected in a Negotiation Agreement that defines the indirect cost rates the institute will use for a given period. For NMIMT, that period is one fiscal year.
XII. Application of Indirect Cost Rates to Sponsored Programs

The negotiated indirect cost rate for each functional area is used to distribute indirect costs to individual federally sponsored projects within that function. The appropriate indirect cost rate is applied to each sponsored project on a monthly basis to determine the amount to be charged to the sponsoring agency for indirect cost recovery.

Comments may be sent to RFD@admin.nmt.edu.
XIII. References


New Mexico Institute of Mining & Technology. “Disclosure Statement (DS-2).”