

**AGREEMENT
FOR PROFESSIONAL SERVICES**

**Rapid City Area Metropolitan Planning Organization
Long Range Transportation Research Study and
Long Range Transportation Plan Update**

THIS AGREEMENT made on this _____ day of December, 2008 between the City of Rapid City, 300 Sixth Street, Rapid City, South Dakota 57701, hereinafter referred to as OWNER, and LSA Associates, Inc. 132 West Mountain Avenue, Ft. Collins, CO 80524, hereinafter referred to as CONSULTANT. This project will encompass the preparation of a Long-Range Transportation Research Study and an update to the Long Range Transportation Plan for the Rapid City Area Metropolitan Planning Organization.

OWNER and CONSULTANT in consideration of their mutual covenants herein agree in respect of the performance of transportation planning services by CONSULTANT and the payment for those services by OWNER as set forth below.

SECTION 1 - BASIC SERVICES TO CONSULTANT

1.1 General

CONSULTANT shall provide to OWNER transportation planning services in all phases of the Project to which this Agreement applies as hereinafter provided. These services will include serving as OWNER'S professional transportation planning services representative for the Project, providing professional transportation planning consultation and advice and furnishing selected transportation planning services.

1.2 Scope of Work

The Basic Services Scope of Work is described in detail in Exhibit A and shall include traffic counts, existing inventory and analysis, traffic forecasting, analysis of traffic operations, analysis of existing and future land uses, alternatives for streetscape and landscaping and public involvement process.

SECTION 2 - ADDITIONAL SERVICES OF CONSULTANT

2.1 Services Requiring Authorization in Advance

If authorized in writing by OWNER, CONSULTANT shall furnish or obtain from others Additional Services of the types listed in paragraphs 2.1.1 through 2.1.7, inclusive. These services are not included as part of Basic Services except to the extent provided otherwise in Exhibit A; these will be paid for by OWNER as indicated in Section 5.

- 2.1.1 Services resulting from significant changes in the general scope, extent or character of the Project including, but not limited to, changes in size, complexity, or method of financing; and revising previously accepted studies, reports or design documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents.

- 2.1.2 Investigations and studies involving, but not limited to, detailed consideration of operations, maintenance and overhead expenses; providing value engineering during the course of design; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing and assisting OWNER in obtaining process licensing; detailed quantity surveys of material, equipment and labor; and audits or inventories required in connection with construction performed by OWNER.
- 2.1.3 Furnishing services of independent professional associates and consultants for other than Basic Services (which include, but are not limited to, customary civil, structural, mechanical and electrical engineering and customary architectural design incidental thereto).
- 2.1.4 Services during out-of-town travel required of CONSULTANT other than visits to the site, attendance at OWNER'S office as required by Section 1, or other services as detailed in Exhibit A.
- 2.1.5 Providing any type of property surveys or related engineering services needed for the transfer of interests in real property and field surveys for design purposes and providing other special field surveys.
- 2.1.6 Preparing to serve or serving as consultant or witness for OWNER in any litigation, arbitration or other legal or administrative proceeding involving the Project (except for assistance in consultations which is included as part of Basic Services).
- 2.1.7 Additional services in connection with the Project, excluding services which are to be furnished by OWNER in accordance with Article 3, and services not otherwise provided for in this Agreement.

SECTION 3 - OWNER'S RESPONSIBILITIES

OWNER shall do the following in a timely manner so as not to delay the services of CONSULTANT:

- 3.1 The Growth Management Director or their designee shall act as OWNER'S representative with respect to the services to be rendered under this Agreement. The Growth Management Director shall have complete authority to transmit instructions, receive information, interpret and define OWNER'S policies and decisions with respect to CONSULTANT'S services for the Project.
- 3.2 Assist CONSULTANT by placing at CONSULTANT'S disposal all available information pertinent to the Project including previous reports and any other data relative to the Project.
- 3.3 Examine all studies, reports, sketches, drawings, proposals and other documents presented by CONSULTANT, obtain advice of an attorney, insurance counselor and other consultants as OWNER deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of CONSULTANT.
- 3.4 Give prompt written notice to CONSULTANT whenever OWNER observes or otherwise becomes aware of any development that affects the scope or timing of CONSULTANT'S services.

- 3.5 Furnish or direct CONSULTANT to provide Additional Services as stipulated in paragraph 2.1 of this Agreement or other services as required.

SECTION 4 - PERIOD OF SERVICE

- 4.1 The CONSULTANT'S period of service shall complete the scope of work stated in Exhibit A by August 19, 2010, provided a written "Notice to Proceed" is issued by December 31, 2008. The CONSULTANT'S services shall be provided in general accordance with the schedule as defined in Exhibit B.

SECTION 5 - PAYMENTS TO CONSULTANT

5.1 Methods of Payment for Services and Expenses of CONSULTANT

- 5.1.1 *For Basic Services.* OWNER shall pay CONSULTANT for Basic Services rendered under Section 1 as detailed in Attached Exhibit A in an amount not-to-exceed **One Hundred Eighty Five Thousand Dollars (\$185,000), including reimbursable expenses**, as detailed in attached Exhibit D "Cost Estimate".

5.1.1.1 *Direct Labor Costs and Overhead.* Direct labor costs and overhead shall be paid at a rate equal to CONSULTANT'S salary cost time the allowable overhead rate as determined by audit, in accordance with 48 CFR Part 31 as shown on attached Exhibit C "Rate Sheet" for all Basic Services rendered on the Project.

5.1.1.2 The approval and acceptance of the billing rates as detailed in attached Exhibit "C" will be contingent upon CONSULTANT providing the required cost breakdowns to verify that costs are in compliance with 48 CFR Part 31 and 23 CFR Part 172.

5.1.1.3 OWNER shall pay CONSULTANT the actual costs (except where specifically provided otherwise) of all Reimbursable Expenses approved by OWNER. The term Reimbursable Expenses has the meaning assigned to it in paragraph 5.4 in accordance with 48 CFR Part 31.

- 5.1.2 *For Additional Services.* OWNER shall pay CONSULTANT for Additional Services rendered under Section 2 as follows:

5.1.2.1 *General.* For additional services of CONSULTANT'S principals and employees engaged directly on the Project and rendered pursuant to paragraph 2.1 on the same basis as outlined in paragraphs 5.1.1.1, 5.1.1.2 and 5.1.1.3.

5.2 Times of Payments

- 5.2.1 CONSULTANT shall submit monthly statements for Basic and Additional Services rendered and for Reimbursable Expenses incurred. OWNER shall make prompt monthly payments in response to CONSULTANT'S monthly statements.

For these services the OWNER shall make prompt monthly payments to the CONSULTANT based on monthly billings submitted by the CONSULTANT up to 90% of the maximum fee for each Task as shown on Exhibit D, "Cost Estimate". The remaining 10% shall be due upon approval of the Final Report for the Project as accepted by OWNER.

5.3 Other Provisions Concerning Payments

- 5.3.1 If OWNER fails to make any payment due CONSULTANT for services and expenses within forty-five (45) days after receipt of CONSULTANT'S statement the CONSULTANT may, after giving seven (7) days written notice to OWNER, suspend services under this Agreement until CONSULTANT has been paid in full all amounts due for services, expenses and charges.
- 5.3.2 In the event of termination by OWNER upon completion of any phase of Basic Services, progress payments due CONSULTANT for services rendered through such phase shall constitute total payment for such services. In the event of such termination by OWNER during any phase of the Basic Services, CONSULTANT also will be reimbursed for the charges of independent professional associates and consultants employed by CONSULTANT to render Basic Services incurred through such phase. In the event of any such termination, CONSULTANT will be paid for unpaid Reimbursable Expenses previously incurred.
- 5.3.3 The employees of CONSULTANT, professional associates and consultants, whose time is directly assignable to the program shall keep and sign a time record showing the element of the Project, date and hours worked, title of position and compensation rate.
- 5.3.4 *Records.* The CONSULTANT shall maintain an accurate cost keeping system as to all costs incurred in connection with the subject to this Agreement and shall produce for examination books of accounts, bills, invoices and other vouchers or certified copies there under if originals be lost at such reasonable time and place as may be designated by the OWNER and shall permit extracts and copies thereof to be made during the contract period and for three years after the date of final payment to CONSULTANT.

All personnel employed by CONSULTANT shall maintain time records for time spent performing work on study described in this Agreement for a period of three years from the conclusion of the study. Time records and payroll records for said personnel shall be similarly retained by CONSULTANT for a period of three years from the conclusion of the study.

Upon reasonable notice, the CONSULTANT will allow OWNER auditors to audit all records of the CONSULTANT related to this Agreement. These records shall be clearly identified and readily accessible. All records shall be kept for a period of three (3) years after final payment under Agreement is made and all other pending matters are closed.

- 5.3.5 *Inspection of Work.* The CONSULTANT shall, with reasonable notice, afford OWNER or representative of OWNER reasonable facilities for review and inspection of the work in this Agreement. OWNER shall have access to CONSULTANT'S premises and to all books, records, correspondence, instructions, receipts, vouchers and memoranda of every description pertaining to this Agreement.
- 5.3.6 *Audits.* The CONSULTANT shall, with reasonable notice, afford representatives of the OWNER reasonable facilities for examination and audits of the cost account records; shall make such returns and reports to a representative as he may require; shall produce and exhibit such books, accounts, documents and property as he may determine necessary to inspect and shall, in all things, aid him in the performance of his duties.

- 5.3.7 Payment shall be made subject to audit by duly authorized representatives of the OWNER. Payment as required in 49 CFR 26.29:

The CONSULTANT shall pay subcontractors or suppliers within 15 days of receiving payment for work that is submitted for progress payment by the OWNER. If the CONSULTANT withholds payment beyond this time period, written justification by the CONSULTANT shall be submitted to the OWNER upon request. If it is determined that a subcontractor or supplier has not received payment due without just cause, the OWNER may withhold future estimated payments and/or may direct the CONSULTANT to make such payment to the subcontractor or supplier. Prompt payment deviations will be subject to price adjustments.

- 5.3.8 In the event the service to the contract is terminated by the OWNER for fault on the part of the CONSULTANT, the agreement shall be null and void, and, the OWNER shall be entitled to recover payments made to the CONSULTANT on the work which is the cause of the at-fault termination. The CONSULTANT shall be paid only for work satisfactorily performed and delivered to the OWNER up to the date of termination. After audit of the CONSULTANT'S actual costs to the date of termination and after determination by the OWNER of the amount of work satisfactorily performed, the OWNER shall determine the amount to be paid the CONSULTANT.

5.4 Definitions

- 5.4.1 Reimbursable Expenses means the actual expenses incurred by CONSULTANT or CONSULTANT'S independent professional associates or consultants directly in connection with the Project, including expenses for: transportation and subsistence incidental thereto; reproduction of reports, graphics, and similar Project related items; and if authorized in advance by OWNER, overtime work requiring higher than regular rates. In addition, if authorized in advance by OWNER, Reimbursable Expenses will also include expenses incurred for computer time and other highly specialized equipment, including an appropriate charge for previously established programs and expenses of photographic production techniques times a factor of 1.0 as determined in accordance with CONSULTANT'S normal accounting practices. All costs must be accumulated and segregated in accordance with Consultant's normal business practice and FAR Part 31

5.5 Ownership of Data

Documents and all products of this Agreement are to be the property of the OWNER. Any reuse of documents for extensions of the Project or other projects shall be at the OWNER'S sole risk and liability.

5.6 Publication and Release of Information

The CONSULTANT shall not copyright material developed under this Agreement without written authorization from the OWNER. The OWNER reserves a royalty-free non-exclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, the work for government purposes.

5.7 Acquisition of Property or Equipment

The acquisition of property or equipment will be in accordance with 49 CFR 18.32.

5.8 Independent Consulting and Subcontracting

While performing services hereunder, CONSULTANT is an independent contractor and not an officer, agent, or employee of the City of Rapid City.

Any employee of the CONSULTANT engaged in the performance of services required under the agreement shall not be considered an employee of the OWNER, and any and all claims that may or might arise under the Worker's Compensation Act of the State of South Dakota on behalf of said employees or other persons while so engaged and any and all claims made by any third party as a consequence of any act or omission of the part of the work or service provided or to be rendered herein by the CONSULTANT shall in no way be the obligation or responsibility of the OWNER.

CONSULTANT shall perform all work except specialized services. Specialized services are considered to be those items not ordinarily furnished by CONSULTANT which must be obtained for proper execution of this Agreement. Specialized services required by the study, if any, will be provided pursuant to Section 2 of this Agreement.

Neither this Agreement nor any interest therein shall be assigned, sublet or transferred unless written permission to do so is granted by the OWNER. Subcontracts are to contain all the required provisions of the prime contract as required by 49 CFR Part 18, definitions.

5.9 Personnel Employment

The CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this agreement, and that he has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gifts, or any other considerations, contingent upon or resulting from the award of making of this Agreement. For breach or violation of this warranty, the OWNER shall have the right to annul this Agreement without liability or, in its discretion to deduct from the agreement price or consideration, or otherwise recover, the full amount of such fees, commission, percentage, brokerage fee, gift or contingent fee.

5.10 Nondiscrimination/ADA

The CONSULTANT agrees to comply with the requirements of Title 49, CFR Part 21 and Title VI of the Civil Rights Act of 1964. The CONSULTANT agrees to submit upon request quarterly Title VI (Civil Rights) State of Contractor reports to the State. The CONSULTANT agrees to provide services in compliance with the Americans With Disabilities Act of 1990.

5.11 Claims

To the extent authorized by law, the CONSULTANT shall indemnify and hold harmless the OWNER, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses and reasonable attorney fees to the extent such claims are caused by any negligent performance of professional services by, the CONSULTANT, its employees, agents, subcontractors or assignees.

To the extent authorized by law, the OWNER shall indemnify and hold harmless the CONSULTANT, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses and reasonable attorney fees, to the extent such claims are caused by OWNERS negligent acts in connection with the PROJECT and acts of its employees, agents, subcontractors or assignees.

It is further agreed that any and all employees of either party, while engaged in the performance of any work or services, shall not be considered employees of the other party, and that any and all claims that may or might arise under the Worker's Compensation Act of the State of South Dakota on behalf of said employees, while so engaged on any of the work or services provided to be rendered herein, shall in no way be the obligation or responsibility of the other party.

5.12 Acceptance and Modification

This Agreement together with the Exhibits and schedules identified above constitute the entire agreement between OWNER and CONSULTANT and supersede all prior written or oral understandings. This Agreement and said Exhibits and schedules may only be amended, supplemented, modified or canceled after consultation with, and approval in writing by, the parties to this Agreement.

5.13 Termination or Abandonment

The CONSULTANT and the OWNER share the right to terminate this Agreement upon giving thirty (30) days written notice of such cancellation to the other party. If this Agreement is terminated under this paragraph, CONSULTANT shall deliver to OWNER all work product produced up to the time of termination. OWNER shall reimburse CONSULTANT for all work completed to the date of termination.

In the event the CONSULTANT breaches any of the terms or conditions hereof, this Agreement may be terminated by the OWNER at any time with ten (10) days written notice and an opportunity to cure. If termination for such a default is effected by the OWNER, any payments due to CONSULTANT at the time of termination may be adjusted to cover any additional costs to the OWNER because of CONSULTANT'S default. Upon termination the OWNER may take over the work and may award another party an agreement to complete the work under this Agreement. If after the OWNER terminates for a default by CONSULTANT it is determined that CONSULTANT was not at fault, then the CONSULTANT shall be paid for eligible services rendered and expenses incurred up to the date of termination.

SECTION 6 – GOVERNING LAW

This agreement and any dispute arising out of this agreement shall be governed by the laws of the State of South Dakota.

6.1 Forum Selection

Any dispute arising out of this contract shall be litigated in the Circuit Court for the 7th Judicial Circuit, Rapid City, South Dakota.

6.2 Compliance Provision

The CONSULTANT shall comply with all federal, state and local laws, together with all ordinances and regulations applicable to the work and will be solely responsible for obtaining current information on such requirements. The CONSULTANT shall procure all licenses, permits or other rights necessary for the fulfillment of its obligation under the Agreement.

SECTION 7 – MERGER CLAUSE

This written agreement including Exhibit A Scope of Work, Exhibit B Schedule, Exhibit C Rate Sheet and Exhibit D Cost Estimate constitute the entire agreement of the parties. No other promises or consideration are a part of this agreement.

SECTION 8 – COMPLIANCE WITH CLEAN AIR ACT

Consultant stipulates that any facility to be utilized in the performance of this contract, under the Clean Air Act, as amended, Executive Order 11738, and regulations in implementation thereof is not listed on the U.S. Environmental Protection Agency List of Violating Facilities pursuant to 40 CFR 15.20 and that the OWNER and the State Department of Transportation shall be promptly notified of the receipt by the CONSULTANT of any communication from the Director, Office of Federal Activities, EPA, indication that a facility to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

SECTION 9 – CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

CONSULTANT certifies, by signing this agreement that neither it nor its Principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

SECTION 10 – INSURANCE AND REPORTING

Before the CONSULTANT begins providing service, the CONSULTANT will be required to furnish the OWNER the following certificates of insurance and assure that the insurance is in effect for the life of the contract:

- A. Commercial General Liability Insurance: CONSULTANT shall maintain occurrence based commercial general liability insurance or equivalent form with a limit of not less than \$1,000,000.00 for each occurrence. If such insurance contains a general aggregate limit it shall apply separately to this Agreement or be no less than two times the occurrence limit.
- B. Professional Liability Insurance or Miscellaneous Professional Liability Insurance: CONSULTANT agrees to procure and maintain professional liability insurance or miscellaneous professional liability Insurance with a limit not less than \$1,000,000.00.

The insurance provided for general liability and errors and omissions shall be adequate for the liability presented, and shall be written by an admitted carrier in the State of South Dakota.

- C. Business Automobile Liability Insurance: CONSULTANT shall maintain business automobile liability insurance or equivalent form with a limit of not less than \$500,000.00 for each accident. Such insurance shall include coverage for owned, hired and non-owned vehicles.
- D. Worker's Compensation Insurance: CONSULTANT shall procure and maintain workers' compensation and employers' liability insurance as required by South

Dakota law.

Before beginning work under this Agreement, the CONSULTANT shall furnish the OWNER with properly executed Certificates of Insurance which shall clearly evidence all insurance required in this Agreement and which provide that such insurance may not be canceled, except on 30 days' prior written notice to the OWNER. The CONSULTANT shall furnish copies of insurance policies if requested by the OWNER.

SECTION 11 - REPORTING

CONSULTANT agrees to report to the OWNER any event encountered in the course of performance of this Agreement which results in injury to any person or property, or which may otherwise subject CONSULTANT, or the OWNER or its officers, agents or employees to liability. CONSULTANT shall report any such event to the OWNER immediately upon discovery.

CONSULTANT'S obligation under this section shall only be to report the occurrence of any event to the OWNER and to make any other report provided for by their duties or applicable law. CONSULTANT'S obligation to report shall not require disclosure of any information subject to privilege or confidentiality under law (e.g., attorney-client communications). Reporting to the OWNER under this section shall not excuse or satisfy any obligation of CONSULTANT to report any event to law enforcement or other entities under the requirements of any applicable law.

SECTION 12 – DISCLOSURE TO REPORT LOBBYING

CONTRACTOR certifies, to the best of CONTRACTOR'S knowledge and belief, that: No Federal appropriated funds have been paid or will be paid, by or on CONTRACTOR'S behalf, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement. If any funds other than Federal appropriated funds have been paid or will be paid to any of the above mentioned parties, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

CONTRACTOR shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

SECTION 13 - SEVERABILITY PROVISION

In the event that any court of competent jurisdiction shall hold any provision of this Agreement unenforceable or invalid, such holding shall not invalidate or render unenforceable any other provision hereof.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement by their duly authorized officers on the day, month and year first written above.

OWNER:

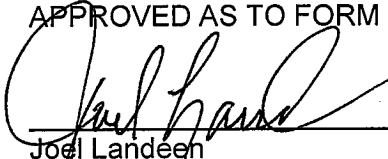
CONSULTANT:

BY: _____
Alan Hanks, Mayor
Date: _____

BY: _____
LSA Associates, Inc.
132 West Mountain Avenue
Ft. Collins, CO 80524
Date: _____

BY: _____
Finance Officer

APPROVED AS TO FORM

 12-10-05
Joel Landeen DATE
Assistant City Attorney

STATE OF SOUTH DAKOTA

COUNTY OF PENNINGTON

On this ____ day of _____, 200__, before me, a Notary Public, personally appeared _____, known to me to be the Mayor of the City of Rapid City, and acknowledge to me that he did sign the foregoing document as such officer and for the purposes therein stated.

Notary Public

My Commission Expires:

(SEAL)

(SEAL)

STATE OF _____

COUNTY OF _____

On this ____ day of _____, 200__, before me, a Notary Public, personally appeared _____, known to me to be a Principal of _____, and acknowledge to me that he did sign the foregoing document as such officer and for the purposes therein stated.

Notary Public

My Commission Expires:

(SEAL)

Address for Giving Notices:
City of Rapid City
Growth Management Department
300 Sixth Street
Rapid City, South Dakota 57701

Address for Giving Notices:
LSA Associates, Inc.
132 West Mountain Avenue
Ft. Collins, CO 80524

EXHIBIT A

SCOPE OF WORK

The Request for Proposal (RFP) issued by the City of Rapid City and the Rapid City Area Metropolitan Planning Organization (MPO) provided a very detailed Scope of Work with descriptions of Tasks and Subtasks, which have been well thought out and articulated. LSA Associates, Inc. proposed a scope of work that responded to the MPO's scope with additional clarification and some alternative approaches. This final Scope of Work is an update of the scope in the LSA proposal that further clarifies the work tasks and approach. In short, it combines the approaches of both scopes into a cohesive and defined Scope of Work.

It should further be noted that there may be some tasks that overlap. As an example, our approach for conducting some of the Long Range Transportation Research identified in Task 2 will be collected through the public outreach efforts that could have been included in Task 1 – Public Involvement. Conversely, some of the research collected in Task 2, such as identifying community needs and desires, will be incorporated into the Public Involvement process.

Task 1 – Public Involvement

The Public Involvement Plan will be centered around three basic techniques to promote a successful effort so that the views of the community are heard and addressed. The first technique is to notify the public that the process is important and that “They Need to Be There.” The second is to provide and promote multiple ways for people to get involved and to stay informed without major time commitments. The third technique is to involve population groups that are traditionally under-represented in the process.

Public Meeting Process

The approach to be used for gaining meaningful input from the public meetings has been used very successfully in preparing Long Range Transportation Plans for other regions. The public meeting process is based on three (3) major phases or decision points necessary to prepare the Rapid City Area MPO Long Range Transportation Plan Update. Each phase/decision point will require input from the public regarding their needs and desires. The three phases are presented graphically in the following figure and details of the three phases follow.



Decision Point 1 – Needs and Desires

One of the first tasks will be the data collection and mapping task. Pertinent local and state transportation policies and programs will be obtained and reviewed by the consultant. In the Needs and Desires phase but prior to the first public meeting, Stakeholder Interviews will be conducted as discussed in Task 2. One of the products of this data collection and analysis task is the preparation of a Mobility Report Card for the region. Additional information on needs and desires will also be collected through various methods as described in Task 2 – Long Range Transportation Research.

Key Messages

Subsequent to this initial work effort, it would be appropriate to create a series of key messages regarding the “state of transportation” in the Rapid City Area. These messages become the starting point for a conversation with the public as to how they would like to see the future evolve. These key messages need to be short in number and easy to understand. Although it is not possible to define these key messages until research has been conducted, they could be something like what follows and responds to the current LRTP’s guiding objectives. Actual messages would be developed from the Task 2 – Long Range Transportation Research Study. Example messages are as follows:

- **Maintenance:** The percent of roads and bridges in poor condition will increase without additional funds. *(Maintenance of the existing transportation system.)*
- **Traffic:** Over the next 25 years, total daily vehicle miles will increase and travel times will be longer. Congestion may increase due to limited resources, increasing construction costs, and diverting of funds to maintenance needs. *(Preservation of access across the City of Rapid City.)*
- **Land Use:** Historically, development within the region has shifted from central City cores with dense, mixed land uses to homogeneous land use growth pattern with homogeneous and often segregated land uses. *(Development of a cohesive transportation network that effectively links Pennington and Meade Counties.)*
- **Growth:** The area will grow by a significant amount over the next 25 years. The region will become increasingly interconnected, socially, economically, and environmentally. *(Maximize the capacity of existing corridors and interstates in the City of Rapid City. Invest in Intelligent Transportation Systems (ITS).)*
- **Funding:** Construction costs are increasing and the Federal and State motor vehicle fuel tax which pay for transportation improvements have been declining relative to the needs for decades. *(New transportation funding will need to be generated locally.)*
- **Aging:** As we live longer, the fastest growing sector in the population will be seniors, which will increase demands to meet their mobility needs. *(Transit service for seniors and those with disabilities will become increasingly important.)*

These example key messages will be tailored to the Rapid City Area based on results of the Research Study.

Workshop

The culmination of the data collection, Stakeholder Interviews, public survey, and development of the key messages is the first public event which will provide public meeting input to the transportation research. This first meeting is extremely critical and serves as the launching point for the Plan. The consultant will request jurisdictional members of the Rapid City MPO to provide lists of key groups or individuals that should attend, followed up by a personal letter signed by a mayor or other elected official formally asking that person to attend because the future of the region needs their input. This first meeting would occur during the Spring of 2009.

Two sessions are planned - one during the day for businesses, government agencies, and the public with a second in the evening for the general public. One option is to have two separate meetings in different parts of the region. This could be done on two separate days or on the same day by different staff. An alternative that works well is to have the meetings in a central, neutral location where representatives from various parts of the Rapid City area sit down with

each other to begin the conversation about the region's future.

For the daytime meeting, RSVP's will be requested to allow pre-mixing of different jurisdictions and interest groups to tables at the event. The RSVP list also helps in defining how many plan to attend and allows closure of registration if the facility fills.

This first meeting or "summit" typically lasts two to three

Transportation Improvements Cost Sheet				Round 1				Round 2				
				\$				\$				
Maintenance	Current Trend: \$250 Moderate: \$500 Full: \$750											
Pedestrian & Cycle Improvements	Current Trend: \$25 Top Priorities: \$65 Vision Plan: \$400											
Other (i.e., special transit, signal operation improvements, etc.)												
Roadway Improvements				Miles/Units (A)	Cost (\$/M) (B)	PMT Per Unit (1000s) (C)	Tally (D)	\$ (B x D)	PMT (C x D)	Tally (E)	\$ (B x E)	PMT (C x E)
	Widen Freeway From 4 to 6 Lanes	2.5	\$50	55								
	Widen Arterial From 2 to 4 Lanes	3.5	\$50	40								
	Widen Arterial From 4 to 6 Lanes	3.5	\$50	35								
	Construct New 2 Lane Arterial	3.5	\$50	25								
	Construct New 4 Lane Arterial	2	\$50	45								
	Construct New Grade Separation	2	\$50	40								
	Construct New Interchange	1	\$50	60								
Transit (Operations & Capital)												
	Bus	50	\$50	2								
	Improved Bus	100	\$50	2								
	BRT	2.5	\$50	10								
	Rail	1.25	\$50	7								
Total Expenditures												
Total PMT												
				Round 1				Round 2				

hours. A PowerPoint presentation starts the evening with key messages geared towards providing attendees with the "state of transportation" within the Rapid City Area. In breakout tables, participants will initially be asked to discuss what they thought was the most important key message and what they believe are the key needs and desires they want this Plan to achieve. It would likewise be appropriate to have the table weigh-in on goals and objectives for developing and evaluating alternatives and their values for the region, such as time, mobility, economy, and environment.

The second breakout table workshop effort is to participate in a "CONNECTIONS" exercise where participants are given a defined transportation budget. As a table, they are asked to purchase maintenance, transportation infrastructure, and transit operating expenses represented by board pieces that they can place on their map. Multi-modal opportunities are a key ingredient in this exercise, as are maintenance activities with the existing transportation systems because of their important functions in the real world and their impact on the workshop participants' transportation budgets in the CONNECTIONS exercise. The purpose of the

CONNECTIONS exercise is to have the participants visualize the limitation of existing funding as related to their transportation needs and desires.

The final product of Decision Point 1 is an Executive Summary of the key messages and public needs and desires. The Executive Summary would also begin to identify what types of transportation improvements the public would like to see to address their needs and desires.

Decision Point 2 – Choices: Scenario Development and Evaluation

Upon completion of the initial needs and desires phase, LSA will work with the Rapid City Area MPO staff and MPO Advisory Committee to develop three (3) transportation scenarios for testing community input. These alternatives are not intended to be “which do you like better, this or this or this?” but rather the testing of different needs and desires investment strategies. As an example, these alternatives might include a status quo for how the region grows and targets transportation investments, an alternative that redirects growth and transportation improvements along critical corridors, and a third that examines increased investment in alternative modes.

As each alternative has their pluses and minuses, highlights of arguments in support of a choice and against a choice will be considered. In addition a summary evaluation of each alternative will be provided. This summary might provide statistical comparisons such as transportation improvement costs to implement the scenario, vehicle miles traveled, average trip length, or serving those with special needs.

The second round of public meetings is scheduled for the Fall of 2009, after the summer vacation period. These public meetings could occur at various locations throughout the Rapid City area. This second meeting would be more of a roundtable for citizens to respond to the alternatives and weigh in on whether alternatives meet their needs or desires. Similar to the first workshop, the meeting would begin with a PowerPoint presentation. It would begin by focusing on Decision Point 1 messages and public direction on their needs and desires, followed by a presentation of the alternatives and a summary of their performance in addressing the community's needs and desires.

In workshop breakout tables, the public will be asked about transportation choices for the region's future based on the three scenarios. Specific question that could be asked might include:

- How does each plan alternative fare based on the community's needs and desires?
- What is the appropriate balance of modes for the Rapid City area?
- What are the most important major deficiencies that need to be addressed?
- How do we get additional funding for what we need?

The presentation and workshop effort is not intended to be a "woe are we" message of traffic problems and congestion with no federal and state funding to solve them. Rather, the importance of the second public meeting is to put forward three distinct futures that address the region's needs and desires and allow the public to weigh in on a preferred choice. The consultant will conduct a preliminary financial analysis to support the information provided at the workshop.

Decision Point 3 – Selection and Refinement of a Preferred Plan

Upon completion of the Decision Point 2, a Draft 2035 Long Range Transportation Plan will be developed based on public and stakeholder input on the three transportation scenarios. This effort will require both a 2035 Needs Plan and a Cost Feasible Plan including preliminary project lists for near and long term time frames. It is also important to provide a preliminary direction of future transportation funding that addresses both existing and future needs.

These third round of public meetings would occur in early 2010, after the holidays. Ideally this meeting would be held at multiple locations to respond to questions and issues that may arise from different geographical areas.

Public Meeting Approach

The approach to designing and conducting the public process will be to include the public in major decision points in a manner consistent with the MPO's Public Involvement Plan. At the start, the consultant will clearly define the goals, objectives and vision for the public process and design a program that meets those needs effectively and efficiently.

Four principle goals for the public participation program are anticipated:

- **Manage Expectations:** being clear on what the public's role in the process will be. It also means reaching the right balance between comprehensiveness, quality, and efficiency.
- **Show Respect for Participants and Their Views:** recognizing that different people will prefer to participate in different ways and that what works in one part of the MPO area may not be effective in another. By providing varied opportunities for participation, we will reach out to different perspectives and interests in the project and at the same time try to make it easy for people to participate.
- **Provide for Meaningful Participation:** provide useful information to people and design constructive ways to learn about their issues, concerns, ideas, and preferences. The approach will be to combine targeted consultation with specific interests or organized groups with opportunities to reach unaffiliated citizens.
- **Make Community Involvement a Team Effort:** the community involvement effort will be a collaborative effort of the consultant team working with all members of the MPO. Through prior experiences in working together, the consultant knows that the success of the project rests with the entire team – how activities are designed, organized, and facilitated; how technical information is presented and questions addressed; how well written materials communicate key messages; and how responsive the team is to public concerns. The approach to designing and conducting the public process will be to integrate the public process with the major decision points in the corridor planning process. At the start, the consultant will conduct research to understand the wide-range of stakeholders, their concerns, and their expectations for participation. The consultant will clearly define the goals and objectives for the public process and design a program that meets those effectively and efficiently.

Methods for Public Outreach

There needs to be an ongoing dialog throughout the process in many different forms. Public workshops are one important form. There are a variety of ways to get the message out and to notify the public. Public service announcements, ads, and posters throughout the region will notify the public of the process and upcoming events. In addition, a project website can provide the most updated information. LSA will provide support for an MPO-hosted and maintained LRTP project website by providing materials in PDF and other common web formats.

Reaching the Traditionally Under-Represented

A final important public involvement strategy is to involve the traditionally under-represented. Supplemental meetings with traditionally under-represented citizens are recommended in the planning process. These might include low-income, minority, or senior citizens and might even include average citizens that would not normally participate in the planning process. This requires that we take the Plan to them. This can include coffee shops, shopping centers, community centers, bus transfer centers or major stops, even churches or the local Wal-Mart. It also requires that they feel comfortable communicating with us. This might also require the assistance of interpreters for Spanish and possibly other languages. In particular, the transit component of the Transportation User Research Study will provide a major outreach opportunity to these groups.

Task 2 – Long Range Transportation User Research Study

As stated in the RFP, the Long Range Transportation (User) Research Study is to **“assess the needs and desires of users of the Rapid City Area transportation system.”** This is a strong statement which indicates that users of the transportation system need to be involved in the process of developing the Long Range Transportation Plan. The research study is designed to go beyond the public participation process and gather statistically significant data regarding public opinion.

Despite the rigorous public involvement effort described above, there will be some members and segments of the public who will not attend. Therefore, the purpose of this task is to use other methods to collect information from a statistically representative sample of the public regarding the region’s transportation needs and desires.

Methods for collecting information from the public include residential and employer surveys, transit surveys (representing a traditionally underserved population), focus groups, and stakeholder interviews. Many different variations of each of these methods are available. As an example, the residential survey can be performed as a phone survey, a mail-in survey, or an internet survey. Such a survey can be targeted to ensure a statistically representative sample (i.e., designed include a spectrum of participants that is representative of the population). It should further be noted that regardless of which technique is used, each has its own bias. Even the traditional telephone survey is biased as it may exclude some that have caller ID or households who do not subscribe to a landline. Specific efforts with regard to each survey are discussed below.

One thing to consider when collecting survey data is: what is this survey information going to be used for? Does it provide opinion based on open-ended questions about transportation needs and desires, or is it a specific response to guided questions that will be used as data input, such as the weighting of criteria for evaluating alternatives.

The Transportation User Research Study will be a series of targeted surveys administered by LSA and Catalyst Consulting which complements the Public Involvement Task. LSA will develop and administer the surveys with Catalyst's assistance and through consultation with the MPO staff. The design of these surveys and the selection of meaningful questions is a critical part of our transportation planning and travel model development practice.

Each survey and the Stakeholder Interviews are further described regarding level of effort. If desired, an incentive could be used in an attempt to further increase participation in the surveys.

Stakeholder Interviews



In the early stages of the project, the consultant will conduct 10 to 20 stakeholder interviews to understand the key transportation needs and desires of the study area. The consultant recognizes that each community is different from the others and the stakeholder interviews help identify what makes a community special and the core principles that

need to be preserved. The stakeholders can include elected officials, members of the MPO Committees, transportation and planning staff, business leaders, and those associated with transit, the chamber of commerce, developers, school districts, home owner organizations, and representatives of seniors.

Thirty minute stakeholder interviews will be scheduled over a one or two day period at City Hall or alternative facility early on in the process, when LSA and/or Catalyst would be in-town as part of the kick-off meeting or data collection phase. LSA will prepare a questionnaire from which to use as a base to ask questions, but the conversation can lead to other areas that the interviewee may want to discuss.

Upon completion of these interviews, LSA and Catalyst will prepare a summary of findings regarding the stakeholders key transportation needs and desires of the community. This initial list of transportation needs and desires will be woven into the residential and employer surveys to determine if there is consistency.

Residential Surveys

LSA will develop a Residents Survey through consultation with the MPO staff and administer the survey online through a private online survey website. Residents will be directed to the website through emails and other notifications. The online survey website will compile responses automatically and provide a database for analysis by the consultant.

The residential survey component will attempt to collect as many online survey responses as possible through targeted mailings, e-mailings, and general publicity. In practice, a 90% confidence level with a margin of error of plus or minus 10% tends to be used for the development of cross-classified trip generation models. These models require a high degree of both accuracy and precision because they are used for making decisions on expensive transportation investments. Since the Research Study will also affect decisions on major transportation investments in the region, the same confidence levels and margins of error will be used, although one could argue that these high levels of accuracy and precision are not necessary for a user survey. These statistical goals translate to 68 survey responses in 4 income quartiles and 68 survey responses in 4 age groups. The overall survey response goal is 272 complete surveys, which would equate to a 90% confidence level with a margin of error

plus or minus 5%. These goals are targets and not guaranteed. Final statistical results will be computed with the responses completed.

Notification and publicity for the Residents Survey will be primarily through the typical contacts maintained by the MPO, including civic organizations, neighborhood groups, Committees, city employees, etc. Response rates can be improved through a series of public service announcements. LSA will support the development of these announcements. We would also propose that a signed letter by the appropriate mayor or elected official accompanying the survey notification stating the importance of their input. Postage is not included in the consultant's budget and would be the responsibility of the MPO. In the Employer Survey discussed below, employers will be asked to notify their employees of the Residents Survey.

LSA and Catalyst will prepare the questionnaire and letter for MPO review, input and approval. At the completion of the survey phase, LSA will prepare a summary report of our findings for both the mail survey and the internet survey.

At the end of the survey, participants will be asked if they would consider being part of a focus group at a later date with an explanation of what that may mean.

Employer Survey

An excellent way to administer an employer survey will be through the Chamber of Commerce. Not only do they have a membership list of a vast majority of the businesses within the area, they also have the interest of the transportation future for the business community and would promote members to take the time out and complete this important survey. Separate letter surveys could also be sent randomly to businesses which are not a member of the Chamber of Commerce.

The Employer Survey will be administered online, similar to the Residents Survey. Similar to the residential household survey, LSA and Catalyst staff will prepare a questionnaire for review and input by the MPO. Upon completion a summary of the employer survey will be prepared. The employers will be asked to participate in Focus Groups later in the process.

This effort assumes that employers will be notified of the Employer Survey through email notification via the Chamber of Commerce. LSA and Catalyst will work with the MPO and Chamber to facilitate the notification. Postage is not included in the consultant's budget, so any postage costs would be the responsibility of the MPO. In the notifications, the employers will be asked to provide information to employees to go online to complete the Residents Survey.

Traditionally Underserved Population – Transit Survey

It should first be noted that this is just one tool for getting information from those identified as the traditionally underserved population. Other methods will be used through the Public Involvement task.

The transit survey is relatively straight forward. A survey questionnaire (with pencil) will be passed out to transit riders on selected busses. Survey forms can be distributed by bus drivers and returned to a drop box provided at bus exits. We have found that transit operators have been very cooperative in assisting in these surveys as they can collect additional information about their riders and that can be used to improve transit operations. Respondents will be asked to participate in a Focus Group later in the process.

LSA will prepare the survey instrument, enter the responses into a database, and analyze and summarize results for the survey.

Focus Groups

Focus Group is a term that is used by different organizations to mean different things. In the world of marketing, focus groups are seen as an important tool for acquiring feedback regarding new products, as well as various topics. In the social sciences and urban planning, focus groups allow interviewers to study people in a more natural setting than a one-to-one interview.

There are also many different types of focus groups including two-way focus groups, dual moderator focus groups, dueling moderator focus groups, respondent moderator focus groups, client participant focus groups, teleconference focus groups and even online focus groups.

The LSA/Catalyst approach is as follows. First off, we would solicit city and county planners, employers, and representatives of the seniors to participate in the public involvement summit and round tables. We may want to even have a special meeting for these groups when we are in town on other tasks, such as when doing stakeholder meetings or public events to gain their input and later assist in reviewing the alternatives and the plan.

For focus groups, we are proposing to concentrate random citizens. One method for identifying this random citizen is through the list of residents that responded “yes” to a query about participation in a focus group when they responded to the Residents, Employer, or Transit survey.

Historically the consultants have found that although well meaning most people do not have the full education on transportation deployment and give responses such as light rail like in Europe or more sidewalks. Granted we may get some good ideas, but they are often not appropriate for the density and development patterns of Rapid City area and would never be affordable. LSA's approach is to have the focus groups provide valuable and much needed input on what criteria and the weight of that criteria on how we evaluate alternatives which will address your transportation needs and desires. We would propose one or two focus groups of 6 to 10 members in the group. An option would be to have one larger focus group of two to three tables at 6 to 10 each. The participants are screened to ensure that they are part of the relevant target market. The session usually lasts for 1 to 2 hours.

The consultants will start with a short presentation of the current transportation system, how it is currently operating, what are the issues which face the region. The purpose of this initial presentation is to provide a common base of transportation issues that have been gleaned from the existing conditions technical data collection and from the stakeholder interviews and previous survey.

Barbara Lewis will then guide the group through a discussion that probes these issues with the focus group as to whether they agree with these findings and what findings are most important to them. The initial discussion is loosely structured and Barbara will encourage the free flow of ideas.

Barbara will then probe the focus groups on criteria to consider when evaluating alternatives. Catalyst utilizes key pad polling so that each focus group member can select the importance of a criterion or selecting one criterion over another. Keypad voting is a powerful tool because the focus participant can instantly see if his or her response is similar or different from others. If all responses are similar then the criterion can be deemed important or not based on the group's

response. If there is a wide variation in responses, Barbara will probe as to what were the thoughts that rated the criterion high and those low.

The end product of this focus group is different from the other transportation research surveys. This product will provide input on what criteria is important when comparing various alternatives to determine whether these alternatives respond to the communities' issues and needs.

Task 3 – Data Collection, Mapping and Data Development

LSA's model development and GIS staff are well versed in the collection, organization, and display of transportation and model related data. Data collection will begin with the travel model already maintained by the MPO. Previous experience with this model suggests that the information contained in the MPO's model is generally in good shape, but an updated and quality control exercise will be undertaken to ensure that data is accurate and current.

One critical element of this task is collection, organization, and review of traffic count data. LSA has developed methods of storing detailed traffic count data on a TransCAD roadway network. Relevant information such as count source and date taken are retained, even in cases where multiple count data are available for a single network link. This allows the data to be plotted for detailed visual review. Adjustment of raw traffic count data to represent peak season for the year 2008 is also made possible by retention of detailed date information.

As part of the traffic count data review, LSA will also identify locations where collection of additional traffic count data would be useful. After a review of screenlines and cutlines, additional traffic count data may be needed to provide complete screenline/cutline count coverage.

LSA has developed a multi-year data structure that allows representation of data for the base year, interim years, forecast years, and many individual alternatives on a single consolidated dataset. While similar in concept to the method already used by the MPO, the structure offers several additional capabilities that will compliment the current structure.

A thorough review of roadway facility type and lane data will be conducted to ensure proper representation in the roadway network layer. To determine area type, LSA typically recommends use of a density-based procedure. This allows for adjustment over time as rural areas develop and become suburban or urban.

It may also be useful to review the speed and capacity information present on the network. Past experience has shown that the best value to use for freeflow speed is often different than the posted speed. For example, the freeflow speed on urban streets is generally slower than the posted speed, due to intersection delay that is experienced regardless of traffic conditions. For capacity, LSA has had success using values derived from the Highway Capacity Manual that vary by facility type and area type. Adjustment of these parameters can improve the predictive capabilities of the model.

LSA will use data that the MPO has already collected to supplement US Census data in development of a household-based dataset for 2008. The RFP states that the remaining socioeconomic datasets (2008 employment, 2035 households, and 2035 employment) will be provided by the MPO. LSA will review these datasets provided by the MPO as part of Task 4.

Special generator and external data will be prepared by LSA for the base and forecast year models. LSA has conducted special generator and external station surveys and can use this experience as a guide in development of the applicable Rapid City Area datasets.

Task 4 – Data Review and Verification

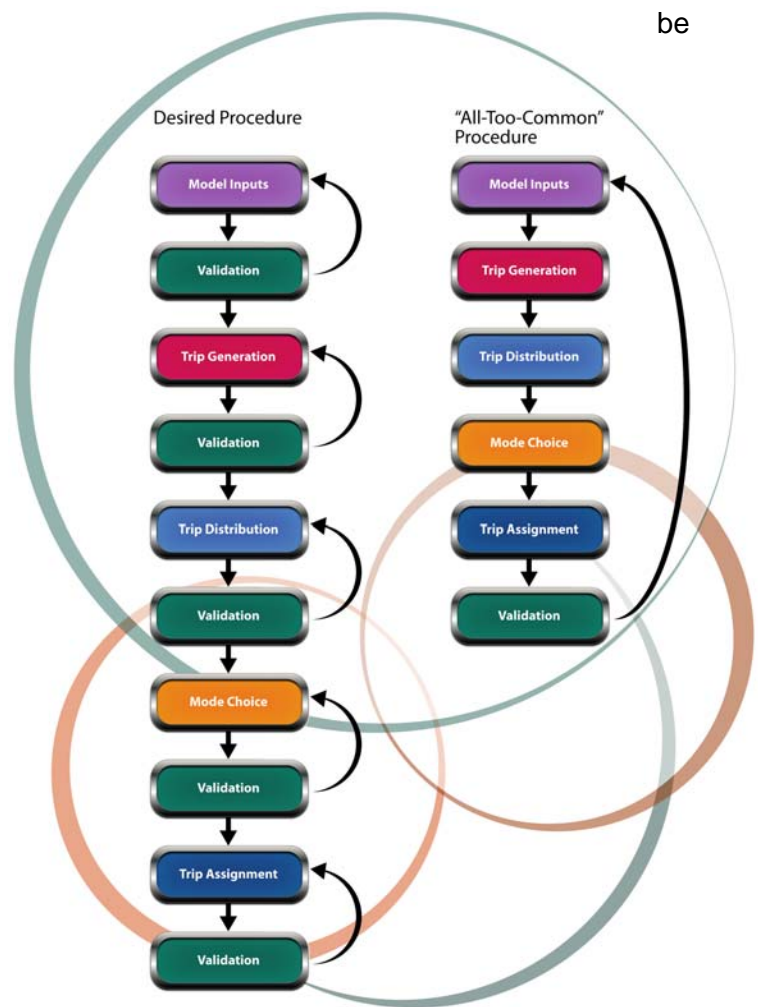
Implementation of this task will be streamlined through careful execution of Task 3. By using logical and consistent organization during the data collection, mapping, and development stage, information will be ready for review and scrutiny. After data has been reviewed by the LSA, straightforward and informative maps can be provided to the MPO and other interested parties such as SDDOT and the City of Rapid City for further review.

Statistical analysis of socioeconomic data and trips at the TAZ level will be used to guide adjustment of the TAZ structure. More importantly, TAZ boundaries will be reviewed in light of existing and future development patterns, roadway hierarchy, and physical features such as ridges and waterways.

LSA will review the household and employment data to ensure consistency with available data sources such as Census 2000, the American Community Survey, and state and county employment data. The datasets will also be checked for a proper jobs/housing balance, which is critical to creation of balanced trip generation results. Inconsistent jobs/housing balance in the base and forecast year datasets can result in un-intuitive model results such as changes in forecast-year trip generation results for zones that are not forecast to change.

If data from the Rapid City Area Add-On to the National Household Travel Survey (NHTS) is available in time for the upcoming model update, LSA can process this data and update trip generation, distribution, and auto occupancy parameters accordingly. This scope assumes that the NHTS data will be used either in the initial model calibration and validation stages or later in the process to verify the model results, depending on availability of the data.

If NHTS data is not available in time for use in this update, the Census Transportation Planning Package can be used to determine trip distribution, transit, and auto occupancy parameters. While this data is limited to home to work travel, it provides important locally specific data that can be used in combination with national data sources or data borrowed from other areas.



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Task 5 – Model Update and Validation

LSA's Travel Model Development Staff has extensive experience developing, updating, and applying travel demand models similar to the one used by the Rapid City MPO. As part of every travel model update and development project, LSA includes a detailed and informative Model Documentation and User's Guide. This document explains the technical process, parameters, and data associated with each model step. The intent of this documentation is to prevent the model from becoming a "Black Box." Instead, the model should function as a "Glass Box," with all components, steps, and processes clearly visible to model technicians, analysts, and decision makers.

Through use of flow charts, detailed tables, and explanatory text, LSA will provide documentation that conveys the technical details embedded in the model. In addition, a detailed step-by-step User's Guide will provide all of the information that is necessary to not only run the model, but to modify parameters and processes as well.

One chapter that will be included in the Model Documentation will address model validation. This chapter will document the validation process, including changes and adjustments made to the model. This chapter will also document the validation results and statistics and compare the Rapid City MPO's model to generally accepted Validation and Reasonableness checks. A reference that will be used in the validation process is the FHWA's Model Validation and Reasonableness Checking Manual (1997).

As described in the RFP, the model will be validated in a stepwise process. Each step, from the model inputs to traffic assignment, will be validated individually against all available data (NHTS, CTPP, Traffic Counts, etc.). Once each model component has been validated, a final model validation will be performed to verify that all steps and the final model output are consistent with observed data.

In addition to the *static validation* described above, a *dynamic validation* is an important step in evaluating the capability of a model to provide meaningful and informative forecast data. The opportunity to develop both the travel model and the Long Range Transportation Plan provides an opportunity to perform a dynamic validation in conjunction with alternatives analysis testing. In the early stages of alternatives analysis testing, detailed model results – including intermediate data – will be closely reviewed. Throughout the model application process, LSA's model developers and technicians will monitor model results for any counterintuitive or unexpected results.

In addition to the work specified in the RFP, LSA will include two value added enhancements to the travel model. LSA provides these enhancements at no additional cost because they have already been developed and can be attached to any TransCAD model with minimal effort. They also streamline the model development and application process to a point where *not* including them could result in lower efficiency.

Scenario Management System

Over the last five years, LSA has continuously been developing and upgrading a unique scenario management system. This system allows the model to be run in an automated fashion while allowing complete and transparent control of model inputs and parameters. The model can be run one step at a time, or in its entirety. The system also supports batch capability, allowing multiple model runs to be processed in sequence. For example, 20 transportation

alternative model runs can be set up to run automatically overnight. Specific input and parameter data can be adjusted independently for each model scenario. This allows more time to be spent analyzing model results and makes detailed sensitivity and alternative testing more feasible.

Model Performance Report

Once a model run is complete, an enormous amount of data is available for analysis. LSA has developed a performance reporting system that generates a streamlined report for each model run. This report:

- Echoes input files, data, and parameters;
- Summarizes intermediate data such as unbalanced and balanced trip generation results, trip length characteristics, and intrazonal trips;
- Tabulates model statistics by facility type and area type;
- Summarize system performance statistics; and
- Reports validation statistics for base year model runs.

Task 6 – Year 2035 Transportation Needs Plan and Cost Feasible Plan



As the effort to prepare the LRTP moves from the foundational stages into the actual Plan development, the project stakeholders will be able to envision how all the pieces come together through the step-wise development of the roadway network. In regional transportation planning, the process is as significant as the final product. To this end, LSA will lead the staff, committee members, community leaders, and other project stakeholders through the Plan development process in a methodical fashion by providing high quality graphics, mapping, and presentation materials that are based on the research and data obtained from previous tasks.

Throughout the LRTP development process, LSA will work closely with project sponsors to identify opportunities and constraints for establishing the future transportation networks. This includes available cost estimates, previous studies, environmental concerns, and other opportunities and constraints. At this point, project-level data will be critical to support the alternatives analysis and roadway network development, so working directly with public agency project sponsors will be important.

In this work phase, it will also be important to coordinate assumptions, data, and results with the public. LSA is keenly aware of the opportunity to obtain information from a well-informed and highly educated public as exists in the Rapid City region. As discussed in Task 1, the public involvement effort will be significant, especially at this point in the Plan's development. Public involvement will focus on the following areas in Task 6:

- Input on project details, including potential environmental issues, community concerns, opportunities and ideas for alternatives to test, and multi-modal issues;
- Review of performance evaluation summaries, cost data, and the evaluation and ranking process;

- Consider environmental justice issues, including the need to identify potentially affected groups and evaluate potential adverse (and positive) impacts relative to these groups; and
- Compare and comment on the Needs Plan and the Cost Feasible Plan.

Existing and Committed Network/Needs Assessment

The 2014 Existing and Committed (E+C) network will be prepared as specified using the most recent Transportation Improvement Program and based on projects that have established public and/or private funding with completion dates on or before 2014. The E+C network forms the basis for the Needs Assessment as it simulates a 2035 no-build network. This will allow for an efficient comparison of 2035 travel demand against the reality of roadway capacity constraints.

Using a series of all-or-nothing (AON) and capacity constrained model runs, a 2035 AON Demand map will be produced and compared against a 2035 Constrained Demand map. The difference between the traffic volumes on these maps indicated where traffic would have rather traveled if not for capacity constraints. This leads directly to the identification of the general areas and specific bottleneck locations in which future travel demand exceeds available capacity. With this information and through coordination with project sponsors, LSA will prepare a preliminary Potential Roadway Alternatives list for review and refinement.

2035 Needs Plan

The reality of limited funding is apparent in regions across the nation and Rapid City is no exception. As growth outpaces transportation infrastructure improvements, there must be some consideration of the fact that not all needs will be funded. In this manner, the development of the 2035 Needs Plan is somewhat of an academic exercise, but it serves an important purpose because it provides the foundation for the development of the 2035 Cost Feasible Plan. It also allows for a very direct calculation of the dollar amount of the transportation needs against what can actually be implemented. In some areas, this ratio is as high as 2 to 3, meaning that the needs significantly outweigh what can be implemented.

LSA will develop the Needs Plan by first consulting with project sponsors and reviewing other local implementation plans in order to refine the Roadway Alternatives list. Projects will be added to the roadway network in the travel model to evaluate the benefits of each project relative to the evaluation criteria established for the alternatives analysis. As the alternatives are evaluated, they will be packaged and additional model runs will be made.

Through this process, a Needs Plan network will evolve. This is an iterative process because of the complexities of travel routing and path-building. For example, there may be two distinct improvements that address a particular problem. The two improvements may both be needed or only one of them may be needed. LSA will incorporate an evaluation methodology that recognizes complex problems with multiple potential solutions. Considerations should include both traditional mobility data as well as all of the other factors important to the community, such as quality of life, economic vitality, accessibility, connectivity, system preservation, and others.

Financial Analysis

Regional transportation financing is a hot topic these days as federal and state funding resources are spread thin and more pressure is placed on local communities to solve their transportation problems. LSA applauds the focus on financial matters that the Rapid City MPO

has incorporated into the Plan's development. LRTP's are essentially implementation plans that are only as valid as the financial resources available to achieve them. To this end, the Financial Analysis will include a diverse set of specific actions to clearly identify project cost estimates, system preservation costs, and opportunities to enhance the available transportation funding levels.

Early in the project, LSA will work with the MPO and federal and state partners to summarize the historical funding levels and potential available funding levels through the continuation of existing programs. Since SAFETEA-LU is soon to expire, future federal levels are somewhat speculative but can be benchmarked against historical levels and adjusted based on consultation. These will be presented to project stakeholders for review along with an analysis of funding shortfalls.

Over the years, LSA has collected numerous examples of unit costs for several types of transportation improvement projects. LSA has regularly added to and refined these unit costs through our projects with clients across the nation. This effort has culminated into a table of unit costs that has been scrutinized by transportation professionals in many areas. While LSA doesn't suggest that these unit costs apply to every region in the country, they certainly provide a very good source for comparison of relative costs by project type and they can be easily refined to match example data in other regions, such as Rapid City. A refined unit cost table will be prepared as part of this effort.

Along with the project level costs, LSA will develop cost estimates on a regional basis to fund system operation and preservation efforts. This includes operations and maintenance costs in addition to capital costs for the multi-modal transportation system.

In addition to the important function of establishing project level costs, LSA will also include an investigation of other potential funding sources in the Financial Analysis. At the basic community funding level, LSA will evaluate fee programs currently in place in the region and identify opportunities for enhancing/implementing them. Another option could include smaller improvement areas in which a fee program is established by working with local developers and staff. These and other ideas along with those discussed in the RFP will be vetted and summarized in various funding scenarios in which potential revenue streams and funding amounts are investigated and presented to stakeholders for review and refinement. The additional projects that could be funded with the additional potential revenues will also be identified.

2035 Cost Feasible Plan

The previous two subtasks, developing the 2035 Needs Plan and Financial Analysis, will set the tone for the preparation of the 2035 Cost Feasible Plan. This is the financially-constrained plan that is required by SAFETEA-LU and is the one that will be forwarded to policy makers for adoption and implementation.

To facilitate this process, LSA will develop several alternative concepts to pursue with the MPO and committees. Based on stakeholder input, these alternatives will be packaged into approximately three Alternative Cost Feasible Plan Scenarios for a detailed evaluation and presentation to project stakeholders. It is likely that some components will be common to more than one scenario, and it is very possible that the final 2035 Cost Feasible Plan will be a synthesis of the best parts of each scenario.

Public input and the financial analysis will serve in part to guide the development of the Alternative Cost Feasible Plan Scenarios. For example, some funding sources have eligibility requirements that constrain possible scenario components. In others, some transportation needs may be so significant and the solution so agreed-upon that it will be part of all scenarios. This is not to say however that there won't be fundamental differences among the scenarios. Some examples might include funding priority alternatives, geo-spatial issues, safety concerns, environmental factors, and others that will be developed as the Plan is prepared.

The 2035 Cost Feasible Plan document will include several chapters summarizing the planning and public processes, the alternatives evaluations, and resulting constrained and unconstrained plans. Throughout the Plan's development, alternative modes, recreational travel, and the relationship between land use, urban design, and transportation will be explored. This work phase marks a decision point in the process in which public involvement should occur. Selection of projects and funding scenarios will be important exercises in the Plan's development. The draft Plan will consist of a number of elements as follows:

- **2035 Needs Plan:** The Plan will not be fully funded given the financial realities of the region. It is useful, however, from the perspective of a needs-based solution, and it serves to support the pursuit of new funding sources or additional funding leverage from existing sources. The 2035 Needs Plan is a wish list of sorts, similar to the manner in which plans were typically prepared previous to ISTEA and TEA-21. The Needs Plan will be summarized in the draft document and a series of maps will be generated and added to the project's GIS mapping inventory.
- **Financial Analysis:** To support SAFETEA-LU's financial constraint requirements and to do what we feel is prudent planning; LSA will prepare a Financial Analysis. Existing funding sources, discretionary funding, and likely and possible new funding sources will be identified and a series of financial forecasts will be developed by LSA. SDDOT, federal agencies, the MPO and others will be solicited to provide background data for this effort.
- **Transportation System Plan Scenarios and Prioritization/2035 Needs Plan:** LSA will apply the various plan scenarios and to the rank-ordered projects by potential funding source to determine prioritized project lists for each scenario. The scenarios and project listings should be reviewed by the committees and public prior to selection. LSA will develop summary materials including spreadsheets and graphics to support these efforts. Once the financial issues are settled, LSA will develop prioritized project listings. Environmental Justice issues will be examined with each funding scenario to assist with the selection and to minimize unnecessary impacts to potentially affected groups.
- **Transit Component:** The Transit Plan will include a short-range element and a long-range strategy assessment that identifies strategies and priorities. The Plan will be coordinated with human services agencies and transit providers and be based on recent planning efforts to manage the local systems and make efficiency adjustments.
- **Bicycle and Pedestrian Non-Motorized Component:** The modal plans already prepared for the region and local jurisdictions will be reviewed by LSA for missing connections, strategic populations for non-motorized mode use, and other opportunities.



- **Short and Long-Term Implementation Plans:** The Cost Feasible Plan will include an implementation plan that matches prioritized needs with available funding. This Plan can be used for future reference in developing projects from the planning and design stages to engineering and construction. In addition, Right-of-Way preservation needs will be facilitated with this information and other data. In this regard, the current short and long-term project lists will be reviewed and updated to ensure that proposed actions will achieve and maintain an integrated, intermodal transportation system that is accessible and provides for the efficient movement of goods and services.
- **Street Design Standards and Corridor Beautification:** The draft 2035 LRTP document can contain a section that summarizes the Street Design Standards of the local jurisdictions and provides recommendations for regional adoption of one set of standards if applicable. LSA will also review each standard design for multi-modal considerations.
- **Draft Plan Document:** LSA will document all aspects of the planning process through which the 2035 LRTP will be developed, including the alternatives analyses, scenario evaluations, freight and inter-modal issues, the public process including environmental justice considerations, and other efforts. We will add discussions and specific policy actions for each of the modal chapters of the Draft Plan. Again, the Draft Plan's development represents a key decision point in the process, and committee and public involvement activities should be conducted at this point to receive public comment on the financial assumptions, project prioritizations and selection, environmental justice review, and other aspects of the planning process. Locally funded projects and Illustrative Projects will be inventoried as well.

The final steps in the Plan's development process are refinement and adoption. These activities will be based on comments received from staff, Committees, and the general public. LSA will finalize the Plan in this task and update the implementation plan with identifiable milestones for each policy action and modal category. These activities will be coordinated with the MPO and implementation schedule for the regional Transportation Improvement Program (TIP).

The Plan will include an Executive Summary with findings and recommendations. The Executive Summary would be a stand-alone brochure-style document that is user-friendly and contains relevant summary information regarding transportation options and future transportation improvement activities. LSA will also develop a multi-modal folding map that identifies the current and future transportation systems for bicycle, pedestrian, transit, and roadway modes. These suggestions may be of interest to the MPO, or there may be other methods and formats that are more to your liking. The final LRTP products will be visually interesting, comprehensive, easy to use, and of high quality.

Task 7 – Reports and Meetings

As stated in the RFP, LSA will provide fifteen (15) copies of the draft Long Range Transportation Plan prior to completion of the final draft report. The final report shall provide the overall documentation of the entire work effort. This includes the following:

- Executive Summary
- Public Involvement
- Long Range Transportation Research Study

- Mobility Report Card (Existing Conditions)
- Goals, Objectives, and Evaluation Criteria
- Forecast No Project Condition
- Alternatives Development
- Alternatives Evaluation
- Selection of a Preferred Alternative
- Financial Plan, Fiscally Constrained Alternative and Funding Options
- SAFTEA-LU Compliance
- Implementation

In addition to the overall report and public meeting attendance, LSA will provide numerous technical appendices and data files. LSA will also provide Rapid City a Model Documentation and Users Guide.

Interim and final reports will be provided in PDF and Microsoft Word format. All database(s) will be provided in DBF file format. We will also provide all geographic analysis based on ArcGIS software and travel model data via TransCAD.

Exhibit B

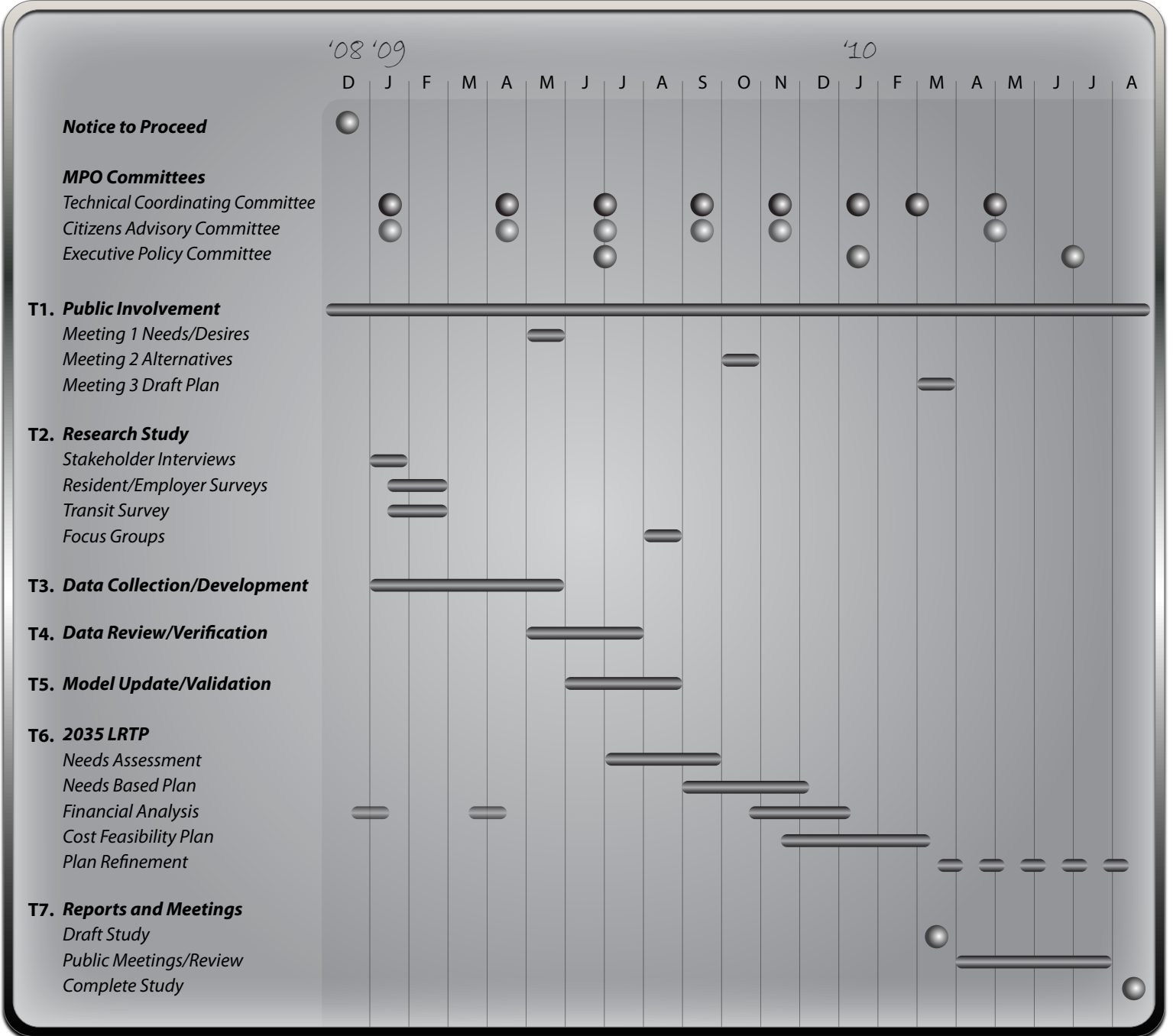


Exhibit C

Billing Rates

LSA Associates, Inc.

Staff	Position	Salary Rate (\$/hr)	Overhead (178.91%)	Salary plus Overhead
Everett Bacon	Principal	\$ 44.23	\$ 79.13	\$ 123.36
Ray Moe	Principal	\$ 58.99	\$ 105.54	\$ 164.53
Sean McAtee	Senior Transportation Engineer	\$ 35.58	\$ 63.66	\$ 99.24
Shanna Guiler	Senior Planner	\$ 30.93	\$ 55.34	\$ 86.27
Kaushik Sabba	Transportation Engineer	\$ 25.00	\$ 44.73	\$ 69.73
Ravi Palakurthy	Transportation Engineer	\$ 28.03	\$ 50.15	\$ 78.18
Stephani Schupbach	GIS Specialist	\$ 28.55	\$ 51.08	\$ 79.63
Scott Ladzinski	Graphics	\$ 27.09	\$ 48.47	\$ 75.56
Elissa Palmer	Office Assistant	\$ 24.64	\$ 44.08	\$ 68.72

Catalyst Consulting

Barbara Lewis	Principal			\$140.00
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Exhibit D
Rapid City Area Long Range Transportation Plan Update
Hours and Budget
December 9, 2008

	Ray Moe	Everett Bacon	Sean McAtee	Stephani Schupbach	Ravi Palakurthy	Kaushik Sabba	Scott Ladzinski	Shanna Guiler	Elissa Palmer	Total Hours	Budget
Tasks											
0 Project Management, & Advisory Committee Mtgs.	20	92	0	0	0	0	0	0	0	112	\$5,249
1 Public Involvement	12	84	0	0	0	0	60	0	35	191	\$6,911
2 Long Range Transportation Research Study	24	50	0	32	0	0	0	0	61	167	\$6,044
3 Data Collection, Mapping and Data Development	0	12	46	58	40	32	0	0	0	188	\$5,745
4 Data Review and Verification	0	4	65	19	36	32	0	0	0	156	\$4,841
5 Model Update and Validation	0	0	69	0	56	60	0	0	0	185	\$5,525
6 Year 2035 Transportation Needs & Cost Feasible Pla	37	84	50	0	50	52	12	54	0	339	\$12,374
7 Reports and Meetings	0	50	19	0	0	0	26	0	27	122	\$4,257
Total LSA Hours and Labor Budget	93	376	249	109	182	176	98	54	123	1,460	\$50,945
										Overhead (178.91%)	\$91,146
										Fixed Fee (10%)	\$14,209
										General Expenses (Printing, Plots, Mail)	\$1,010
										Direct Expenses (Data Entry, Focus Group Payments, Incentives)	\$1,500
										Person Trips Travel & Per Diem (6 at \$700)	\$4,200
										Subconsultant (Catalyst Consulting)	\$21,990
										Total	\$185,000