Interstate 8 and Interstate 10 Hidden Valley Roadway Framework Study

Draft Working Paper No. 1

Project Management Plan/Work Plan

Revised August 2007

Prepared for

Prepared by
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- Appendix A Project Team Directory
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- Appendix D List of Maps for Environmental Scan and Working Papers
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PROJECT WORK PLAN

1. Client and project basic information

MAG contract no. 342

Job No.: 60023744

Project Name: Interstate 8 and Interstate 10 Hidden Valley Roadway Framework Study

Client Name: Maricopa Association of Governments (MAG)

Key Client Contact(s): Bob Hazlett and Ken Hall

Gross Revenue $: 770,000 Notice to proceed date: 3/19/07 Scheduled completion date: 8/31/08

2. Project Organization and Contacts

Officer in Charge (or Principal): Stephen O’Brien

Project Manager: John McNamara

Project Quality Representative: David Chase

Technical Director: Steve Boschen

Other key company staff:

<table>
<thead>
<tr>
<th>Name</th>
<th>Firm</th>
<th>Phone No.</th>
<th>E-Mail</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethan Rauch</td>
<td>DMJM Harris</td>
<td>602-337-2645</td>
<td><a href="mailto:ethan.rauch@dmjmharris.com">ethan.rauch@dmjmharris.com</a></td>
<td>Deputy PM; transp. planning</td>
</tr>
<tr>
<td>Michael Kies</td>
<td>DMJM Harris</td>
<td>602-337-2595</td>
<td><a href="mailto:michael.kies@dmjmharris.com">michael.kies@dmjmharris.com</a></td>
<td>I-10 access</td>
</tr>
<tr>
<td>Jaclyn Pfeiffer</td>
<td>DMJM Harris</td>
<td>602-337-2594</td>
<td><a href="mailto:jaclyn.pfeiffer@dmjmharris.com">jaclyn.pfeiffer@dmjmharris.com</a></td>
<td>Community planning; GIS</td>
</tr>
<tr>
<td>Mansi Sachdev</td>
<td>DMJM Harris</td>
<td>602-337-2652</td>
<td><a href="mailto:mansi.sachdev@dmjmharris.com">mansi.sachdev@dmjmharris.com</a></td>
<td>Data analysis and QC</td>
</tr>
<tr>
<td>Serelle Laine</td>
<td>DMJM Harris</td>
<td>602-337-2548</td>
<td><a href="mailto:serelle.laine@dmjmharris.com">serelle.laine@dmjmharris.com</a></td>
<td>Supervision and QC of environmental overview</td>
</tr>
<tr>
<td>David Young</td>
<td>DMJM Harris</td>
<td>602-337-2517</td>
<td><a href="mailto:david.young@dmjmharris.com">david.young@dmjmharris.com</a></td>
<td>Environmental overview</td>
</tr>
<tr>
<td>Jessica Popp</td>
<td>DMJM Harris</td>
<td>602-337-2559</td>
<td><a href="mailto:jessica.popp@dmjmharris.com">jessica.popp@dmjmharris.com</a></td>
<td>Environmental overview</td>
</tr>
<tr>
<td>Rodney Bragg</td>
<td>DMJM Harris</td>
<td>602-337-2617</td>
<td><a href="mailto:rodney.bragg@dmjmharris.com">rodney.bragg@dmjmharris.com</a></td>
<td>Cost estimating</td>
</tr>
<tr>
<td>Edie Griffith-Metley</td>
<td>DMJM Harris</td>
<td>520-299-8700, x123</td>
<td>edie.griffith- <a href="mailto:metley@dmjmharris.com">metley@dmjmharris.com</a></td>
<td>Drainage context</td>
</tr>
</tbody>
</table>

Subcontractors:

<table>
<thead>
<tr>
<th>Firm</th>
<th>Contact Name</th>
<th>Phone No.</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilson &amp; Company (Wilson)</td>
<td>Dan Marum</td>
<td>480-893-8860</td>
<td>Transportation planning</td>
</tr>
<tr>
<td>Partners for Strategic Action (PSA)</td>
<td>Peggy Fiandaca</td>
<td>480-816-1811</td>
<td>Public involvement</td>
</tr>
<tr>
<td>Curtis Lueck &amp; Associates (CLA)</td>
<td>Curt Lueck</td>
<td>520-743-8748</td>
<td>Funding/implementation</td>
</tr>
<tr>
<td>Lima &amp; Associates (Lima)</td>
<td>Pete Lima</td>
<td>602-331-0600</td>
<td>Traffic modeling</td>
</tr>
</tbody>
</table>
Other key project contacts (e.g. Regulatory Agencies, Permitting Authorities, Suppliers, etc.):

<table>
<thead>
<tr>
<th>Organization</th>
<th>Contact Name</th>
<th>Phone No.</th>
<th>Significance to project</th>
</tr>
</thead>
<tbody>
<tr>
<td>None other than those listed in Appendix A.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inter-office communications. (For projects that require communications with other offices within the company, indicate contact information below.)

<table>
<thead>
<tr>
<th>Office</th>
<th>Contact Name</th>
<th>Phone No.</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tucson</td>
<td>Edie Griffith-Mettey</td>
<td>520-299-8700 x123</td>
<td>Drainage Characteristics</td>
</tr>
</tbody>
</table>

3. Communications and Meetings

The DMJM Harris Project Manager shall be copied on all communications including e-mails, letters, communication contact reports and meeting briefings. The Project Manager will prepare and distribute to the project team, as an attachment to an e-mail, meeting notes recorded on the meeting agenda for the kickoff meeting, individual meetings between DMJM Harris and other stakeholders, and any additional progress meetings to the project team.

4. Project Description and Purpose

Project Limits:
The project covers an area of approximately 2,000 square miles in Maricopa and Pinal Counties, Arizona, bounded generally by the Gila River on the north, I-8 on the south, the 459th Avenue alignment on the west, and I-10 (Phoenix-Casa Grande Highway) on the east.

Project History:
This is the second of a series of MAG Roadway Framework Studies that will cover rapidly developing areas of Maricopa County and adjacent counties. DMJM Harris is completing the I-10/Hassayampa Valley Roadway Framework Study. “Hidden Valley” is the first such study extending outside Maricopa County.

Project Purpose:
The purpose of this study is to establish a conceptual network of freeways, parkways and arterials that will be capable of meeting long-range traffic demand while gaining broad support from both public and private stakeholders in the area. The MAG/consultant team will plan a transportation network in the study area, determine and prioritize operational and safety improvements, and form a framework for regional connections and roadways within the study area. Specific elements include modeling of buildout socioeconomic conditions, development and evaluation of alternatives, access control recommendations, conceptual cross-sections, prioritization of projects, and an analysis of funding options.

5. MAG Goals and Objectives

MAG’s overall goal is to continue the collaborative process initiated in the I-10/Hassayampa Valley Study, thus building momentum in support of subsequent Roadway Framework Studies, such as the New River/Northwest Valley study scheduled for the next fiscal year. Specific objectives include:

- Develop a network of north-south and east-west roadways, varying in functional classification, that will provide access throughout the study area and preserve the function of Interstates 8 and 10 as regional freight corridors in Arizona. This network will incorporate existing roadways within the study area; propose future limited-access, multi-modal and arterial facilities, and other regional connections; and serve both identified and future development proposals within the study area.
- Optimize the network to provide regional accessibility by channeling traffic to and from I-8 and I-10 at the least possible service traffic interchange (TI) locations.
- Formulate a framework for constructing the roadway framework, regional connections between Maricopa and Pinal counties, and future TIs along I-8 and I-10.
- Examine opportunities for incorporating alternative transportation modes into the development of the study. These opportunities may include, but are not limited to, expanding local bus service, express bus service,
bus rapid transit, light rail, and commuter rail to the study area and identifying support facilities, such as
park-and-ride lots and non-motorized transportation facilities, into the area framework.

- Describe the range of funding sources and opportunities that may be available, both today and in the future,
to help implement the recommended framework. Then summarize the project-level funding analysis in a
funding/financing plan for the framework, using those sources deemed most viable by the project’s
stakeholders.
- Recommend an access management system for each functional classification and opportunities for
establishing access management plans along specific roadway network proposals.
- Consult and work with the project’s stakeholders throughout the study process.

6. Scope of Work (Tasks)

1. Project Initiation
2. Public Involvement (to be led by Partners for Strategic Action)
3. Data Collection (assisted by Wilson & Co.)
4. Travel Demand Forecast Preparation (working with MAG staff, & with assistance from Wilson and Lima)
5. Development of Transportation Network Alternatives (assisted by Wilson and Lima)
6. Evaluation of Network Alternatives (assisted by Wilson and Lima)
7. Draft Transportation Network Recommendation (assisted by Wilson)
8. Transportation Funding & Implementation Strategies (led by Lueck)
9. Final Network Recommendation (assisted by Wilson)
10. Project Documentation

7. Deliverables Due to MAG Including Protocols for Delivery

<table>
<thead>
<tr>
<th>Description of deliverable due to MAG</th>
<th>Date due to MAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft working paper for each of the first eight tasks listed above—generally in accordance with the schedule (Section III of the attached Scope of Work, Appendix B). Specific dates will be established with MAG PM during study.</td>
<td>See schedule in Appendix B, Scope of Work</td>
</tr>
<tr>
<td>Draft Final Report</td>
<td>No later than 6/30/08</td>
</tr>
<tr>
<td>Final Report and Executive Summary</td>
<td>No later than 8/31/08</td>
</tr>
</tbody>
</table>

Protocol for delivery: each product will first be reviewed internally by the Project Director (John McNamara) and one planner other than the author. The MAG PM and the Funding Partners (listed in Appendix A) will have the opportunity to comment on each product prior to final formatting at DMJM Harris. When completed, each product will be submitted for publication on the MAG website. MAG encourages electronic distribution of all products.

8. Key Milestones

<table>
<thead>
<tr>
<th>Description of key milestones</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG/DMJM Harris project kickoff/team organization meeting</td>
<td>3/22/07* (* = has already occurred)</td>
</tr>
<tr>
<td>MAG/DMJM Harris subconsultant team organization meeting</td>
<td>3/29/07*</td>
</tr>
<tr>
<td>DMJM Harris internal project kickoff meeting</td>
<td>4/26/07*</td>
</tr>
<tr>
<td>Funding Partners’ meetings</td>
<td>4/2*, 6/4, 8/6, 10/1, 12/3—(2007)—others TBD</td>
</tr>
<tr>
<td>Study Review Team meetings</td>
<td>4/12/07*, 10/9/07, 12/13/07—others TBD</td>
</tr>
<tr>
<td>Development Forums</td>
<td>6/7/07, 10/9/07 (tentative)</td>
</tr>
<tr>
<td>Community Forums (each at 3 locations)</td>
<td>September 2007, February 2008 (tentative)</td>
</tr>
</tbody>
</table>
9. Project Budget and Cost Schedule
Attach a detailed project budget with time charge code numbers.

- Total contract amount $770,000
- Fee type: [ ] Lump Sum  [ ] Time and materials  [ ] Time charge with maximum
  [ ] Time charge  [ ] Cost X multiplier  [ ] Rate charge
  [ ] CPFF  [ ] Other (describe)

Project Charge Number: 60023744

All direct costs (printing, reproduction, mailing, travel, subsistence, etc.) shall be charged to a related task as directed by the Project Manager, except that any unallowable ODCs (e.g., mileage charge in excess of allowable MAG rate) will be charged to 9999. All DMJM Harris and subconsultant labor, if any, shall be charged to the appropriate discipline/task labor charge numbers noted above. Contact the Project Manager to obtain the proper charge number should there be any question.

.0001 Project Initiation .0002 Public Involvement
.0003 Data Collection .0004 Travel Demand Forecast Preparation
.0005 Development of Transportation Network Alternatives .0006 Evaluation of Network Alternatives
.0007 Draft Transportation Network Recommendation .0008 Transportation Funding Implementation Strategies
.0009 Final Network Recommendation .0010 Final Project Documentation
.9999 Unallowable Direct Expenses

There are no unusual features in the expense report or time charge approval process. However, the contract does not permit DMJM Harris to bill MAG more for any task than the amount budgeted for that task.

Specify dates or milestones when cost-to-complete estimates will be prepared. Identify what controls and procedures will be used to control and maintain the project budget. See applicable policy.

Yes  No
[ ] [ ] Monthly earned value analysis
[ ] [ ] Monthly update or cost-to-complete comparing forecast with actual
[ ] [ ] Monthly staffing level analysis
[ ] [ ] Mandatory 30% cost-to-complete – all design projects and all projects with fees $250,000 or more
[ ] [ ] Mandatory 60% cost-to-complete – all projects over $50,000
[ ] [ ] Mandatory 90% cost-to-complete – all projects with fees $250,000 or more

Project Budget Forms for each charge number are maintained by the Project Manager. Budgeted hours for each charge number will be provided to the Discipline Leads at the start of the project. Labor and other direct cost (ODCs) from the ARIS system will be monitored by the Project Manager weekly. The project team members may request labor hours and/or budgets from the Project Manager at any time.

10. File Index and Filing Procedures
All project correspondence including e-mails pertaining to scope, schedule, fee, invoices or key recommendations or decisions must contain the project number and a hard copy will be placed in the project document management system or in the electronic filing system.

The project file(s) is/are located at the Phoenix office (if the project is conducted in more than one office or where files are located in more than one Department identify these other locations and say when the documents will be combined at one location).

The records administrator for this project is Deanna Huelskamp.
Secretarial and administrative assistance for the project is provided by Deanna Huelskamp.

Electronic information will be maintained in (insert electronic file path address) N:\60023744 using the

11. Project Issues, Problems, Risks, Challenges and Strategies to Mitigate

<table>
<thead>
<tr>
<th>Issue</th>
<th>Strategy to Mitigate</th>
</tr>
</thead>
<tbody>
<tr>
<td>No unusual or extraordinary risks are expected.</td>
<td></td>
</tr>
</tbody>
</table>

- Was an AECOM Risk Analysis required for this project? [ ] Yes [x] No

12. Project Quality Assurance and Control (Quality Plan)

The assigned Project Quality Representative or QA Manager is: David Chase

The assigned Quality Control Review Team will be as follows (include Discipline Reviewers, Independent Calculation Engineers, Specification Coordinators, etc.):

<table>
<thead>
<tr>
<th>Name of QC (Discipline) Reviewers</th>
<th>Discipline / Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serelle Laine</td>
<td>Environmental</td>
</tr>
<tr>
<td>John McNamara</td>
<td>Reviews all draft products prepared by planning staff.</td>
</tr>
<tr>
<td>Mansi Sachdev</td>
<td>Reviews work and calculations of other planners.</td>
</tr>
<tr>
<td>Ethan Rauch</td>
<td>Reviews Mansi’s data analysis and other technical work.</td>
</tr>
</tbody>
</table>

The Quality Team’s activity schedule and specific budgets, if applicable, are shown below:

<table>
<thead>
<tr>
<th>Activity or Deliverable</th>
<th>Discipline or Technical Peer?</th>
<th>Approximate Date(s)</th>
<th>$ Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Paper 2: Public Involvement Plan*</td>
<td>Discipline</td>
<td>4/26/07</td>
<td>NA</td>
</tr>
<tr>
<td>Working Paper 3: Existing &amp; Future Conditions</td>
<td>Discipline^</td>
<td>8/1/07</td>
<td>NA</td>
</tr>
<tr>
<td>Working Paper 4: Travel Demand Forecast Development**</td>
<td>Discipline</td>
<td>9/15/07</td>
<td>NA</td>
</tr>
<tr>
<td>Working Paper 5: Transportation Network Alternatives</td>
<td>Discipline</td>
<td>11/1/07</td>
<td>NA</td>
</tr>
<tr>
<td>Working Paper 8: Funding &amp; Implementation Strategies***</td>
<td>Discipline</td>
<td>4/30/07</td>
<td>NA</td>
</tr>
<tr>
<td>Draft Final Report &amp; Executive Summary</td>
<td>Discipline^</td>
<td>6/30/07</td>
<td>NA</td>
</tr>
</tbody>
</table>

*To be drafted by subconsultant, PSA
**To be drafted by subconsultant, Wilson & Company, with assistance from Lima & Associates
***To be drafted by subconsultant, CLA
^Environmental elements to be reviewed by DMJM Harris senior environmental planning staff
State how quality oversight of Subcontractor work will be accomplished and who in our firm will assess the adequacy of the subcontract work.

<table>
<thead>
<tr>
<th>Subcontractor</th>
<th>How quality oversight will be accomplished</th>
<th>Person(s) assessing adequacy of subcontractor quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilson &amp; Company</td>
<td>DMJM Harris PM or Deputy PM will review all submittals before submitting to MAG. Firm has QC plan on file.</td>
<td>Ethan Rauch</td>
</tr>
<tr>
<td>Partners for Strategic Action</td>
<td>DMJM Harris PM or Deputy PM will review all submittals before submitting to MAG. Firm has QC plan on file.</td>
<td>Ethan Rauch</td>
</tr>
<tr>
<td>Curtis Lueck &amp; Associates</td>
<td>DMJM Harris PM or Deputy PM will review all submittals before submitting to MAG. Firm has QC plan on file.</td>
<td>Ethan Rauch</td>
</tr>
<tr>
<td>Lima &amp; Associates</td>
<td>DMJM Harris PM or Deputy PM will review all submittals before submitting to MAG. Firm has QC plan on file.</td>
<td>Ethan Rauch</td>
</tr>
</tbody>
</table>

All subconsultants must perform a QC/QA review of their deliverables prior to submitting the deliverables to DMJM Harris. Documentation (i.e. completed review forms or statement on their letter or transmittal) that confirms their review process has occurred must accompany their deliverables. The subconsultant is responsible for interdiscipline reviews that interface with their Scope of Work. The Project Manager, or designee, will perform an independent review of the subconsultant’s deliverable for general conformance prior to submitting the deliverable to MAG.

The subconsultants will be subjected to surveillance audits by the Regional Quality Manager during the project to verify the deliverable submitted to DMJM Harris are reviewed in accordance with their accepted QC/QA plan. Each subconsultant has an approved QA/QC plan on file at DMJM Harris. These plans are available for MAG review.

Upon completion of the subconsultant’s deliverable, the Project Manager will use the corporate Subconsultant Evaluation Form to provide feedback regarding the subconsultant’s performance.

Electronic Files:
All electronic files will be saved under N:\60023744\prod. All incoming files will be placed in the “IN” directory in a folder named and dated appropriately. All outgoing files will be copied to the “OUT” directory named and dated appropriately. All production work will be completed within the “Prod” directory folder. All design work will be completed within the “Design” directory folder.

The following is the Validated Technical Software that will be used on this project:
- None required for this project
13. Health and Safety Plan

An approved Health and Safety Plan for this project has been distributed electronically to all participating DMJM Harris personnel.

- Are there construction or other field activities on this project? **Yes**  
  - No

- Is there an approved Health and Safety Plan for the Project? **Yes**  
  - No

- Is safety training necessary for staff working on this project? **Yes**  
  - No

All DMJM Harris project team members attending field reviews for this project shall review; sign the Evidence of Review form to the project Field Investigation Project Health and Safety Plan (PHSP), including all revisions. In signing the PHSP, all project team members agree to adhere to the PHSP for the duration of the project. The signed PHSP is located in the Project Document Control files under file index number 801. The project team shall review the Project Health and Safety Plan prior to each field review.
# Appendix A
## Project Team Directory

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Phone</th>
<th>E-mail</th>
<th>Project Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob Hazlett</td>
<td>MAG</td>
<td>602-254-6300</td>
<td><a href="mailto:bhazlett@mag.maricopa.gov">bhazlett@mag.maricopa.gov</a></td>
<td>MAG PM</td>
</tr>
<tr>
<td>Ken Hall</td>
<td>MAG</td>
<td>602-452-5055</td>
<td><a href="mailto:khall@mag.maricopa.gov">khall@mag.maricopa.gov</a></td>
<td>MAG Deputy PM</td>
</tr>
<tr>
<td>Steve O’Brien</td>
<td>DMJM Harris</td>
<td>602-337-2615</td>
<td><a href="mailto:steve.o.brien@dmjmharris.com">steve.o.brien@dmjmharris.com</a></td>
<td>Officer in Charge</td>
</tr>
<tr>
<td>John McNamara</td>
<td>DMJM Harris</td>
<td>602-337-2587</td>
<td><a href="mailto:john.mcnamara@dmjmharris.com">john.mcnamara@dmjmharris.com</a></td>
<td>Project Manager</td>
</tr>
<tr>
<td>Ethan Rauch</td>
<td>DMJM Harris</td>
<td>602-337-2645</td>
<td><a href="mailto:ethan.rauch@dmjmharris.com">ethan.rauch@dmjmharris.com</a></td>
<td>Deputy PM/QC</td>
</tr>
<tr>
<td>Michael Kies</td>
<td>DMJM Harris</td>
<td>602-337-2595</td>
<td><a href="mailto:michael.kies@dmjmharris.com">michael.kies@dmjmharris.com</a></td>
<td>I-10 access</td>
</tr>
<tr>
<td>Jaclyn Pfeiffer</td>
<td>DMJM Harris</td>
<td>602-337-2594</td>
<td><a href="mailto:jaclyn.pfeiffer@dmjmharris.com">jaclyn.pfeiffer@dmjmharris.com</a></td>
<td>Community planning; GIS</td>
</tr>
<tr>
<td>Mansi Sachdev</td>
<td>DMJM Harris</td>
<td>602-337-2652</td>
<td><a href="mailto:mansi.sachdev@dmjmharris.com">mansi.sachdev@dmjmharris.com</a></td>
<td>Data analysis; planning</td>
</tr>
<tr>
<td>Rodney Bragg</td>
<td>DMJM Harris</td>
<td>602-337-2617</td>
<td><a href="mailto:rodney.bragg@dmjmharris.com">rodney.bragg@dmjmharris.com</a></td>
<td>Cost estimating</td>
</tr>
<tr>
<td>Edie Griffith-Metley</td>
<td>DMJM Harris</td>
<td>520-299-8700, x123</td>
<td><a href="mailto:edie.griffith-metley@dmjmharris.com">edie.griffith-metley@dmjmharris.com</a></td>
<td>Drainage context</td>
</tr>
<tr>
<td>Serelle Laine</td>
<td>DMJM Harris</td>
<td>602-337-2548</td>
<td><a href="mailto:serelle.laine@dmjmharris.com">serelle.laine@dmjmharris.com</a></td>
<td>Environmental QC</td>
</tr>
<tr>
<td>David Young</td>
<td>DMJM Harris</td>
<td>602-337-2517</td>
<td><a href="mailto:david.young@dmjmharris.com">david.young@dmjmharris.com</a></td>
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### Agency Funding Partners

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APPENDIX A
SCOPE OF SERVICES
MARICOPA ASSOCIATION OF GOVERNMENTS (MAG)
DMJM HARRIS, INC.
INTERSTATES 8 AND 10 - HIDDEN VALLEY ROADWAY FRAMEWORK STUDY

I. WORK PLAN AND TASKS

The purpose of this section is to outline the major tasks required to be performed by the CONSULTANT to produce the needed analyses and deliverables to MAG.

Task 1 – Project Initiation
Purpose: To provide a solid foundation for a collaborative relationship between MAG, its agency partners and the team; and for timely completion of all tasks on an aggressive schedule.

1.0 Assumptions: For this and other tasks, MAG will be responsible for notifying Funding Partners and Survey Review Team members of meeting times and dates; CONSULTANT will be responsible for all other aspects of the meetings, including presentation materials, agenda and minutes. CONSULTANT is responsible for the Development Forums, except that the initial list of invitees will be jointly developed by the CONSULTANT and MAG.

1.1 Complete the detailed project schedule, based on the final scope of work approved prior to execution of contract.

1.2 Develop a base map showing the study area boundaries, physical features, jurisdictions, and major highways. Prepare a list of environmental, land use, and infrastructure maps (primarily GIS-based) to be produced during Task 3. Examples include existing and future population and employment (levels and densities), existing and future land use, municipal planning areas, economic activity centers, generalized land ownership, topography/slope, drainage features, utility corridors, special management areas, roadway functional classifications, and summary opportunities/constraints.

1.3 Prepare draft study goals and objectives for discussion at the first Survey Review Team meeting.

1.4 Develop methods for (a) identifying 2030 and buildout travel demand, and (b) evaluating and selecting alternatives. These will be subject to refinement during the study, especially in response to input from the Survey Review Team and the community.

1.5 Draft the Quality Assurance/Quality Control (QA/QC) plan; revise to reflect comments from MAG.

1.6 Compile a list of resources available from MAG (Web site and staff); discuss with MAG staff strategies and priorities for additional efficient data collection.

1.7 Hold a project initiation (scoping) meeting of the Survey Review Team in cooperation with MAG staff. Prepare displays including study area map, major roadways, key issues and project schedule.
1.6 Schedule and hold the first Development Forum in conjunction with an Survey Review Team scoping meeting and Funding Partners' meeting. Prepare all handouts, displays, workshop materials and PowerPoint presentation, as well as meeting minutes. Community/stakeholder activities.

Task 2 – Public Involvement

Purpose: To educate stakeholders and the public at large about the study, provide ample opportunities for community input, and to create a process for building consensus in support of the recommended roadway network that will result from this study.

Note: Individual public involvement activities are noted under the technical tasks with which they will be associated. The exceptions are Funding Partners' and Survey Review Team meetings, which will be held throughout the study as needed. The Survey Review Team will meet every one to two months, while the Funding Partners may meet more often, especially when critical decisions are approaching.

Task 3 – Data Collection

Purpose: To develop the information on existing and projected conditions necessary for successful completion of traffic forecasting and other tasks.

3.0 Assumptions: In Subtask 3.2 the CONSULTANT will rely on readily available, secondary source data readily obtainable from the Internet, U.S. Census, and publicly available agency files. CONSULTANT will correspond with resource agency staff and meet personally with such staff when necessary. However, there will be no primary data collection in the field, except cursory windshield surveys to verify selected information. In Subtasks 3.3 and 3.4, the CONSULTANT will schedule, lead, and document each interview; MAG and the CONSULTANT will jointly establish the list of interviewees; and the MAG project manager or other MAG staff will attend interviews when possible. CONSULTANT will maintain a stakeholder database. CONSULTANT will be responsible for obtaining data from sources other than MAG, although MAG may be called on to assist in case of non-responders. CONSULTANT will work directly with the Funding Partners and Survey Review Team as appropriate, and will prepare a draft of the newsletter for review by MAG. In this and subsequent tasks, printed newsletters may be supplemented by more narrowly focused e-newsletters to be distributed by MAG. At MAG's option, any or all of the printed newsletters may also be replaced by an e-newsletter. MAG will provide available socioeconomic data and projections at the SAZ, RAZ, and city/MPA levels.

3.1 Review previous transportation and land use studies, including current General Plans and their circulation elements, Small Area Transportation Studies, economic development plans, ASLD Conceptual Land Use Plans, major streets & routes plans, and local zoning code requirements for section line roads. Summarize any findings pertinent to the present study.

3.2 Prepare a generalized environmental overview. Topics will include, but not necessarily be limited to: geologic and environmental characteristics (e.g., land forms, topography, drainage, soils, biota), socioeconomic impacts (right-of-way acquisition, Title VI/Environmental Justice) and impacts on the physical and natural environment (e.g., species habitat, Waters of the United States, Section 4(f) impacts). Because of the size of the study area, a single overview of the study area will cover all three alternatives and point out any instances where clear differences between them exist. Sources of information will include Maricopa and Pinal Counties (for GIS and aerial mapping), the U.S. Fish & Wildlife
3.5 Interview planning/development staff and transportation or public works staff from each jurisdiction in the study area, to obtain information on approved developments, development proposals currently in the entitlement process, anticipated development proposals, programmed (committed) transportation projects, and planned or proposed projects, including those privately funded within master planned communities. Land use information will include comprehensive or general plan revisions, rezonings, subdivision plans, and nonresidential development plans.

3.4 Conduct the first round of stakeholder interviews with major landowners, major employers, and other key stakeholders. Follow through, as appropriate, with additional leads obtained at these interviews.

3.5 Prepare a database of development proposals, including current status (approved, in process, anticipated); location; jurisdiction (current and MPA); gross area; net developed area at buildout; planned population, dwelling units and employment in 2030 and at buildout; estimated buildout date; and other information to be identified with MAG staff.

3.6 In consultation with MAG and its agency partners, and using the location and density of known projects as a guide, estimate the locations, intensities and types of development in the remainder of the study area. These estimates will be made for 2030 and buildout conditions. The CONSULTANT team will take into account such factors as topographic constraints, open space preservation (including wilderness areas), and Indian lands in estimating net developable land.

3.7 Aggregate quantitative population and employment estimates on known development projects and remaining developable land by TAZ, for subsequent use in year 2030 and buildout modeling.

3.8 Compile available roadway and traffic data on existing thoroughfares (freeways and arterials) throughout the study area. These data are expected to include, where available: recent traffic counts, pavement type and condition, functional classification, right-of-way width, cross-section/number of lanes, design speed, structures, drainage features, railroad crossings, and traffic control devices. This information will be shown in graphic and/or tabular form.

3.9 Identify all programmed (committed or funded) short-term roadway improvements in the study area. This will be done by consulting documentary sources (the current MAG TIP, current TIPs/CIPs of all jurisdictions in the study area, ANIT construction program), and through agency staff interviews.

3.10 Obtain available details on long-range, but committed projects included in the MAG RTP and funded through Proposition 400 (e.g., the planned SR-95 freeway, right-of-way acquisition for SR-93S, south of the Gila River), as well as long-range projects funded through the Pinal County half-cent transportation sales tax.
3.11 Use the information gathered in the last two subtasks to establish the existing plus committed roadway network. This will become the base network for development of transportation network alternatives.

3.12 Meet with the Funding Partners and Survey Review Team to discuss the long-range (2030 and buildout) land use and socioeconomic projections for the study area, as well as the base roadway network for buildout conditions. Findings from the first set of stakeholder interviews, and their implications for study goals and objectives, will also be discussed.

3.13 Produce the first public information newsletter. Community/stakeholder activity.

3.14 Conduct the first set of three community workshops at locations across the study area, to review existing conditions and identify issues. Community/stakeholder activity.

Task 4 - Travel Demand Forecast Preparation
Purpose: To provide coordination with MAG staff, and direct the preparation and analysis of travel demand forecasts for the Hidden Valley study area. The travel forecasts will provide the basis for identification of projected roadway deficiencies, future year (2030 and buildout) roadway requirements, and development of implementation strategies. To facilitate the staged development of future networks through a tiered (staged) approach, it will be necessary to complete a series of tasks in support of the travel demand modeling process. Some of the following tasks will be conducted exclusively for Tier 1, while others will be repeated in subsequent tiers.

4.0 Assumptions: MAG will be responsible for modeling, using the TransCAD platform. CONSULTANT will review, refine and extend the RAP structure under MAG supervision. MAG will refer the CONSULTANT to appropriate Pinel County staff for coordination of the modeling process. CONSULTANT will be responsible for the analysis of MAG model output, and will work closely with MAG staff to incorporate updated socioeconomic projections for the study area into the modeling process.

4.1 Meet with MAG modeling staff to discuss overall approach, including specification of available data sets, land use and socioeconomic variables, and transportation networks. Acquire data file and establish data interface for coding of inputs and presentation of modeling output. Determine data set requirements between MAG staff and the CONSULTANT team, including responsibilities, data formats, and related protocols.

4.2 Prepare a Travel Demand Methodology Report to document the modeling protocols, including MAG staff and CONSULTANT responsibilities, and to specify key model input assumptions and expectations relative to model outputs.

4.3 Review and redefine the TAZ structure in the study area common across with land use specifications. Refine centroid connectors and update related roadway network attributes, as necessary to ensure accessibility. Assemble background information for purposes of defining the base network for 2030 and buildout conditions.
4.4 Assemble 2030 and buildout land use data at the TAZ level and disaggregate within the study area.

4.5 Specify/prepare inputs to, and coordinate application of, the MAG travel demand model to assign trips to the future base network for both buildout and 2030.

4.6 Develop mode choice factors to account for various levels of alternative mode (e.g., transit, walk, bicycle) use for application in the Tier 2 analysis.

4.7 Complete Tier 1 of the buildout base network evaluation, and make appropriate adjustments to this network. Tier 1, the first level of evaluation, will be an unconstrained, all-or-nothing traffic assignment using buildout population and employment forecasts with the base future roadway network. This iteration will review travel demand across critical screenlines and provide information on cumulative travel demand in key corridors.

4.8 Use the Tier 1 results to estimate the future capacity needs and deficiencies of major study area roadways, and to refine the base buildout network before more detailed modeling.

4.9 Prepare district-to-district trip tables for traffic assignments generated in Tier 1. The purpose of these trip tables is to assess the relationship of study area growth to the rest of the MAG region. Provide a preliminary assessment of the need for new and expanded regional roadway connections.

Task 5 – Development of Transportation Network Alternatives

Purpose: To develop a set of three complete network alternatives, or bundle packages of proposed transportation improvements for subsequent evaluation.

5.0 Assumptions: Responsibilities for interviews (Subtask 5.6) will be the same as in Task 3. Subtask 5.9 will be the joint responsibility of CONSULTANT and MAG staff working together. Responsibilities for the Development Forum are the same as in Task 1.

5.1 Conduct the initial set of three focus groups to obtain specialized input on environmental, commercial transportation, and intergovernmental coordination issues. Community/stakeholder activity.

5.2 Hold the second Development Forum in conjunction with a Survey Review Team meeting and a Funding Partners' meeting. At this meeting, the study team will present (a) the buildout base network (existing plus committed), and (b) a set of generalized network concepts in the form of "bread lines on a map." Through unstructured comment and a structured exercise, obtain input that can be used to finalize the three alternative "bundles" transportation improvement packages. Community/stakeholder activity.

5.3 Define a range of potential roadway network alternatives at a conceptual level, based on known developments, topographical constraints, assessment of travel demand patterns, and arterial spacing standards. Use detailed trip tables from the MAG transportation model to assess levels of demand along key corridors, and to make a preliminary determination of capacity requirements.

5.4 Perform a simple "fatal flaw" or "critical flaw" screening of conceptual alternatives.
5.5 Using input from stakeholders (especially the second Development Forum), initial modeling results and findings of the "fatal flaw" screening, delineate three roadway network alternatives for subsequent modeling and more detailed evaluation. Each alternative will specify approximate alignments of freeway, parkways/boulevard and principal arterials; improvements to existing facilities; freeway interchange locations; connections to regional roadways in adjacent planning areas; and a generalized vision of high capacity transit opportunities at buildout.

5.6 Present the three draft alternatives to the Funding Partners and Survey Review Team for review and comment. The presentation will compare and contrast the three alternatives, and will include a preliminary, qualitative assessment of the relative effectiveness of each alternative in meeting study objectives.

5.7 Use input from the Funding Partners and Survey Review Team to revise, refine, and elaborate the three alternatives. If appropriate, elements of the original alternatives may be recombined to form hybrids.

5.8 Conduct the second round of stakeholder interviews to discuss the network alternatives. Community/stakeholder activity.

5.9 Conduct briefings of elected officials in each jurisdiction financially supporting the study, and of the appropriate MAG committees, to explain the three alternative alternatives and solicit input. Community/stakeholder activity.

Task 6 - Evaluation of Network Alternatives

Purpose: To provide a sound technical foundation for selection and further development of a recommended transportation network alternative for Hidden Valley.

5.0 Assumptions: In Subtask 6.2, MAG will assist the CONSULTANT in obtaining current information on typical unit costs in pertinent areas of Maricopa and Pinal counties. To the extent feasible, CONSULTANT will also rely on its own cost information obtained from recent projects for ADOT, MCDOT, and other clients in the area. Other assumptions correspond to those for similar activities in preceding tasks.

6.1 Complete Tier 2 of the travel demand modeling analysis. Initially, this tier will focus on optimizing network performance based on a static forecast of buildout population and employment. The three network configuration alternatives will be analyzed to determine the ability of the network to respond to anticipated demand and supply an adequate level of capacity. Through this process, the study team will gain a clear understanding of the ability of the network to meet the needs created by buildout growth conditions. If residual network deficiencies so warrant, Tier 2 could also include consideration of increased investment in alternative modes, by developing a "planning-level" approach to establishing an appropriate transit mode split in the traffic assignment. Tier 2 may also involve testing an alternative land use scenario to demonstrate the effect of more balanced land use, with an emphasis on increased employment in Pinal County and southwestern Maricopa County. The goal of this analysis would be to test the sensitivity of travel demand to a higher level of locally-based employment, and to quantify the
potential benefits of a more balanced relationship between jobs and housing. Further, Tier 2 will include a series of network iterations to test the ability of the alternatives to accommodate predicted travel demand.

6.2 Develop preliminary, order-of-magnitude construction and right-of-way costs for each alternative, using generalized assumptions derived from typical costs in central Arizona.

6.3 Hold the second set of community workshops to obtain feedback on the alternatives from the community at large, and make final changes to the alternatives to reflect this input, as appropriate.

6.4 Develop a matrix for evaluation of the alternatives. Evaluation criteria are expected to include, but not be limited to: mobility, access, cost, environmental impacts or constraints (including Title VI/Environmental Justice), consistency with land use and transportation plans, arterial and parkway/boulevard continuity, regional connectivity, safety, estimated ability to meet travel demand at 2030 and buildout, and community support. This evaluation process will incorporate Tier 3 of the travel demand modeling analysis, in which the three network alternatives will be refined to optimize them for buildout conditions, based on the results of the network iterations and sensitivity analysis.

6.5 Present the matrix and evaluation results to the Funding Partners and Survey Review Team, to obtain stakeholder feedback on the evaluation results, as well as input on an overall recommendation regarding a preferred transportation network alternative.

6.6 Revise the recommendations to reflect comments from the Funding Partners, Survey Review Team, and MAG staff comments.

6.7 Produce the second newsletter. Community/stakeholder activity.

6.8 Conduct the second set of three community workshops to obtain comments on the three evaluated alternatives and the proposed recommendation. Change the recommended alternative, as appropriate, to reflect community input.

Task 7–Draft Transportation Network Recommendation
Purpose: To elaborate and refine the preliminary recommendation for a preferred transportation network alternative.

7.0 Assumptions: See Task 6 for proposed MAG assistance with obtaining current unit cost information.

7.1 Conduct the second set of three focus groups to obtain specialized input on environmental, commercial transportation and intergovernmental coordination issues, as they relate to the preferred alternative. Community/stakeholder activity.

7.2 Estimate planning level capital, operating/maintenance, and right-of-way costs for the recommended network, using typical construction and maintenance unit costs per lane-mile in central Arizona, right-of-way costs per acre of land, and add-on percentages for design, engineering and material.
cost contingencies, and construction management. Because of uncertainty about timeframes for system implementation and buildout, all costs and revenue projections will be given in constant year 2007 dollars.

7.3 Compile a list of specific projects that constitute the key elements of the recommended alternative. The list is expected to include not only capital construction projects, but also policies, strategies, and other actions necessary to help make the plan achieve study implementation. This subtask will include an initial assignment of jurisdictional responsibilities and potential funding sources.

7.4 Develop a project prioritization process in consultation with MAG staff and the Funding Partners, for subsequent presentation to the Survey Review Team. Criteria for prioritization may include: expected funding availability, overall cost, ease of implementation, environmental scan, cost/benefit, improvement in traffic-carrying performance, functional classification, community support (where known), coordination with related projects, regional connectivity, local jurisdictional priorities, partnership opportunities, urgency (e.g., some actions may need to be taken now to preserve right-of-way or permit future access management), and any project-specific constraints.

7.5 Create a draft matrix listing projects in priority order, along with responsible jurisdictions, potential funding sources and general timeframe for implementation (e.g., 2005-2015, 2015-2030, 2030-buildout). Many of the short-term items are expected to be management actions and policies rather than major capital projects. Prepare a map showing the location of recommended projects, and a GaNet chart illustrating the sequence of major projects.

7.6 Present results of this subtask to the Survey Review Team. Comments will be incorporated in the final version of the recommended network alternative in Task 9.

7.7 Produce the third newsletter. Community/stakeholder activity.

Task 8 – Transportation Funding Implementation Strategies

Purpose: To prepare a concise, readable guide to potential funding options as they relate to the recommended alternative, and to lay out a long-range strategy intended to obtain the required resources.

8.0 Assumptions: This task is the CONSULTANT’S responsibility, but because of both its timeliness and sensitivity, a creative exchange of ideas between MAG and the CONSULTANT is expected throughout the project.

8.1 Current Revenue Sources and Financing Strategies: Create a snapshot of the “health” of transportation funding in the study area, identifying current revenue sources (e.g., HURF, special taxes, fees, general fund) used by jurisdictions. The magnitude of revenues will be quantified for the past 10 years and forecast for 20 years (in 2007 dollars), based on future land use plans for Hidden Valley. Identify and describe financing strategies currently in use, such as general obligation bonds, revenue bonds, improvement districts, and community facility districts. Quantify the revenue shortfall in the study area, based on adopted plans and programs.

8.2 Other Authorized Revenue Sources and Financing Alternatives: Identify and describe the revenue sources and financing strategies available to local jurisdictions that are currently authorized by
statute but NOT being used. Examples include toll roads, property taxes dedicated to transportation, and municipal sales taxes. Based on interviews with local agencies, determine why these sources are not used and forecast the revenue potential of each alternative. Describe and forecast the revenue potential and feasibility of augmenting current sources, such as a statewide motor fuel tax increase.

8.3 Review of Peer Areas: Compare and contrast current transportation revenues and financing options in similar areas of the state (Pima County, for example), surrounding states, and other high-growth regions of the U.S. This research effort and literature review will provide a partial frame of reference for selecting alternative revenue sources in subsequent tasks.

8.4 Transportation Funding Trends and Directions: This is a long-range study, so the revenue analysis must consider changes in travel behavior, roadway and vehicle technology, and fuel sources. The team will identify probable future directions in transportation funding, such as GPS-based mileage charges, new user fees and congestion charges, the implications of energy-efficient vehicles, and changes in primary fuel sources. This effort will augment the frame of reference for selecting future revenue sources.

8.5 Recommend Revenue Sources: Use a matrix analysis to evaluate and recommend potential new and expanded revenue sources for Hidden Valley. Summarize the prior subtasks, quantify the order-of-magnitude revenue potential, identify implementation strategies, and suggest a "champion" to facilitate their enactment and adoption. This subtask will very likely set the stage for a multi-county or statewide initiative to consider new revenue sources and financing strategies based on the needs of the area, the review of peer areas, and the assessment of trends and directions.

Task 9 – Final Network Recommendation

Purpose: To complete the final recommendation for a preferred transportation network alternative, using input from the Funding Partners, Survey Review Team and other stakeholders.

9.0 Assumptions: Responsibility for Subtask 9.1 is joint MAG/CONSULTANT, like Subtask 5.9.

9.1 Conduct the second round of elected official briefings to explain the recommended alternative transportation network and solicit input.

9.2 Meet with the Survey Review Team to discuss proposed projects and preliminary priorities, and make adjustments as appropriate.

9.3 Produce the fourth newsletter, with a section on funding opportunities and challenges.

9.4 Revise, refine and elaborate all elements of Task 7 to incorporate findings and recommendations of Task 8 (transportation funding), as well as input from the Funding Partners, Survey Review Team, elected officials, other stakeholders, Interested members of the community and MAG staff.

Task 10 – Project Documentation

Purpose: To convey information on the study and its findings in the manner that will be most useful to MAG, its agency partners and the community at large.
10.1 Prepare a detailed report outlined during Task 8 for review and approval by MAG staff.

10.2 Develop the Draft Final Report documenting all work done in the project, including the complete set of working papers. The report will emphasize clear and concise presentation of information by using graphics and tables. Records of the stakeholder outreach/consent process (e.g., meeting summaries, comment matrix, correspondence) and supporting technical material will be placed in appendices. An executive summary, in a format to be determined in consultation with MAG, will be designed to present the objectives and findings of the project quickly to a wide readership. If a poster format is selected, CONSULTANT will print up to 200 copies.

10.3 Electronically distribute (e.g., on CD) the Draft Final Report to MAG staff, the Funding Partners and Survey Review Team members for review and comment.

10.4 Hold the final Survey Review Team meeting to present highlights of the report and discuss comments and questions from Survey Review Team members.

10.5 Revise the report to reflect comments; add an appendix with a matrix recording all comments and their disposition.

10.6 Use the established CONSULTANT Quality Assurance/Quality Control (QA/QC) procedures for this project to conduct a final internal review of the document before its resubmittal to MAG.

10.7 Submit a pre-final "proof version" of the report to MAG for final review prior to publication.

10.8 Issue the final report and executive summary in a format designed for convenient user access and easy distribution. While a small number of hard copies (ten or fewer) may be produced for archival purposes, the primary mode of distribution is expected to be posting on the MAG Web site, possibly supplemented by CD-ROM for Funding Partners, the Survey Review Team and major stakeholders. Electronic publication opportunities will be explored with MAG staff.

10.9 Assist MAG staff in presenting the findings and recommendations of the study to appropriate MAG committees and the MAG Regional Council for acceptance. This will include development of a concise PowerPoint presentation.

II. DELIVERABLES

* Working Paper #1, Work Plan, covering all of the elements listed above (except the scoping meeting and Development Forum), and the final scope of work
* Working Paper #2, Public Involvement Plan, including strategies to ensure continuing coordination and participation of partners and stakeholders, a detailed strategy with events and activities, a tentative schedule for the first round of stakeholder interviews, and a detailed list of MAG and CONSULTANT responsibilities. (In general, CONSULTANT will be responsible for meeting materials, presentation slides, displays, handouts, refreshments and minutes; MAG will be responsible for meeting notice and advance publicity. Securing venues for community
meetings will be a joint responsibility. Also summaries of community meetings and other events, including records of all comments, throughout the project.

- Working Paper #3, Existing and Future Conditions, describing 2030 and buildout land use projections, summarizing related findings of previous studies, and appending a database of development plans and proposals. This report will also map the base (buildout) roadway network, and document existing roadway characteristics and planned improvements.
- Draft Hidden Valley environmental scan, to be reviewed with the Funding Partners, Survey Review Team, and environmental resource agencies, including the Environmental Focus Group (see Task 5). Review the maps in response to comments as appropriate. Maps are expected to include:
  - Study area (with and without aerial bases)
  - Jurisdictions and planning areas
  - Year 2030 total population and employment (SAZ level)
  - Year 2030 population and employment density (SAZ level)
  - Land ownership
  - Environmental context
  - Drainage features
  - Recreational opportunities
  - Areas of special protection (e.g., wilderness areas, Sonoran Desert National Monument)
  - Air quality non-attainment boundaries
  - Existing and future land use
  - Planned developments
  - Economic activity centers
  - Roadway functional classifications
  - Existing and proposed transportation corridors
  - Others, depending on MAG and stakeholder interests and on availability of data in a suitable format.

- Working Paper #4, Travel Demand Forecast Development, including Travel Demand Methodology Report and Tier 1 analysis of modeling results.
- Working Paper #5, Transportation Network Alternatives, presenting the three alternatives and describing their derivation from the future conditions inventory, initial traffic modeling results, public/stakeholder input, and traffic flow analysis.
- Working Paper #8, Funding Implementation Strategies, including:
  - Current funding sources, financing strategies, and revenue forecasts
  - Currently available alternative funding sources, financing strategies, and resulting revenue forecasts
  - Findings from peer review of up to five states and three subregions within or outside Arizona
  - Trends and directions in transportation funding
  - Conclusions and implementation recommendations for Hidden Valley transportation revenue sources.

Intermediate white papers or briefing papers for some or all of Subtasks 8.1 through 8.4 (developed during Tasks 4 through 7), to be determined by MAG and the CONSULTANT. With appropriate refinement, these will become sections of the final working paper.
III. SCHEDULE

It is anticipated that the project will commence on or about February 15, 2007 and be completed by August 31, 2008.

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<th>TASK</th>
<th>SCHEDULE FOR COMPLETION</th>
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<td>1. Project Initiation</td>
<td>March 31, 2007</td>
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<td>2. Public Involvement</td>
<td>August 31, 2008</td>
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<td>3. Data Collection</td>
<td>June 30, 2007</td>
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<tr>
<td>4. Travel Demand Forecast Preparation</td>
<td>August 15, 2007</td>
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<tr>
<td>8. Implementation Options and Strategies</td>
<td>March 31, 2008</td>
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</table>

IV. CONSULTANT WORK TEAM

The CONSULTANT will form a work team of key personnel (as named below) to perform the project. Other labor requirements will be filled by other staff members of Wilson & Company, Inc., Curtis Lueck & Associates, Lima Associates, and Partners for Strategic Action.

Mr. Stephen O’Brien will serve as principal-in-charge for the CONSULTANT. He will be primarily responsible for overseeing the project and ensuring quality control. John McNamara is the project manager. He will have the primary responsibility for the preparation of the project’s tasks, recommendations, and planning documents.

He will be assisted by Rammy Horne, AICP (Community and Environmental Context); Peter Lima, PhD, PE, Lima and Associates (Travel Demand Forecasting); Dan Marum, Wilson and Company (Alternative Transportation Networks); Ethan Reuch, AICP (Recommended Planning Framework); Curtis Lueck, PhD, Curtis Lueck & Associates (Implementation Strategies); and Peggy Flanders, AICP, Partners for Strategic Action (Stakeholder Outreach/Consent). The team’s Quality Assurance/Quality Control officer is Paul Weung, PE.

V. BUDGET

The budget for the project by task is as follows:
Appendix C
Data Requested and Received from MAG

Data Requested and Received by DMJM Harris

All related MAG GIS data, including:
- Freeways
- Municipal planning areas
- Existing (year 2000) land use
- Future land use
- Developments
- Residential completions
- Air quality non-attainment areas
- Open space

Requested but Not Yet Received (as of May 7, 2007)

List of MAG studies to use for inventory of related studies.
Appendix D
List of Maps for Environmental Scan and Working Papers

Study Area (base)
Study Area with Aerial Base
Jurisdictions with Planning Areas
Buildout Total Population
Buildout Population Density
Buildout Total Employment
Buildout Employment Density
Hidden Valley Study Area Land Ownership
Parks, Trails and Recreation Areas
Wildlife Linkages
Threatened and Endangered Species
Natural Vegetation
Areas of Hazardous Materials Concern
Areas of Historic and Archaeological Sites
Floodplains
Drainage Studies
Section 4(f)/Section 6(f)
Airports/Noise Contours/Flight Paths
Air Quality Non-attainment Area Boundaries
Existing and Future Power Line Corridors
Existing Land Use
Future Land Use
Public Land Management Studies
Study Area Planned Developments
Major Economic Activity Centers
Roadway Functional Classification System
Municipal Functional Classification Systems
State Highway Functional Classification System
Existing and Proposed Transportation Corridors