

## **Exhibit A**

### **Navajo County Regional Transportation Study Scope of Work Wilson & Company – November 27, 2007 (REVISED)**

#### **Task 1.0: Refine Work Plan**

*Purpose: Develop final Work Plan and obtain approval from Navajo County and ADOT. This Work Plan will be an integrated effort between:*

- Navajo County
- ADOT (TPD and Holbrook District)
- US Forest Service
- The City of Holbrook
- The City of Winslow
- NACOG
- Apache Nation
- Navajo Nation

*Additionally, this Work Plan will update the recently completed Southern Navajo County Transportation Plan and associated Community Plans to include SATS elements as defined by the SATS process.*

- 1.1: Prepare for Technical Advisory Committee Meeting #1
- 1.2: Conduct Technical Advisory Committee Meeting #1 to obtain input on key transportation issues and concerns to formally scope the Work Plan.
- 1.3: In consultation with Navajo County and ADOT, prepare a detailed Work Plan for review and comment by the TAC. The Work Plan will include a revised project schedule, a detailed study area map, and a final Scope of Work with refinements to address issues of concern to the City and TAC members.

*Product: Detailed Work Plan*

#### **Task 2.0 Current Conditions**

*Purpose: Establish a database to support subsequent study efforts, identify current roadway deficiencies, identify and map environmental resource areas of concern, provide the foundation for traffic modeling, review programmed network improvements, identify required short-range improvements, and document issues requiring attention.*

- 2.1: Work with study area planning staffs to establish and document existing land use patterns.
- 2.2: Identify and assemble all relevant traffic volume count data and previous traffic impact studies conducted in the study area. Identify multi-modal transportation currently utilized.
- 2.3: Organize all existing conditions traffic data into a database for modeling and analysis purposes. Where necessary, convert raw 24-hour counts to Average Daily Traffic (ADT) using day-of-week and seasonal adjustments provided by the cities, county, and/or ADOT.
- 2.4: Collect and summarize roadway and traffic data, including:

## Navajo County Regional Transportation Study – Work Plan

- Jurisdictional or agency responsibility
- Roadway functional classifications
- Roadway number of lanes and cross-sections, including right-of-way width, median type, curb/sidewalk and bicycle facilities
- Pavement type (paved or unpaved)
- Programmed/planned roadway improvements on the part of the cities, Navajo County, ADOT and NACOG.
- Traffic control device inventory
- Locations and conditions of bridges, structures and drainage features

This information will be provided to the Project Team by the TAC. Where requested to do so, the consultant will carry out up to eight (8) hours of limited field observations to verify specific information.

- 2.5: Collect, map and summarize roadway safety data to be provided to the Project Team by the TAC.
- 2.6 Review all relevant studies completed within the last five years, including the Southern Navajo County Sub-Regional Transportation Plan, the City of Holbrook General Plan, the previous Holbrook Small Area Transportation Study, the Navajo County Comprehensive Plan, and other relevant documents identified by TAC members. Compile a list of recommendations identifying which have been implemented and which are currently programmed or planned.
- 2.7: Interview key elected and appointed officials, and other selected stakeholders, to obtain a wide range of views on transportation issues and needs. Interview notes will be included as an appendix.
- 2.8: Assemble current population and dwelling unit data from Census 2000, Navajo County, City of Holbrook and City of Winslow building permit data, and the Northern Arizona Council of Governments (NACOG). Use commercial employment database (e.g., InfoUSA, Dun & Bradstreet) together with data from TAC staff to estimate year 2006 employment levels.
- 2.9: Assemble physical, natural and cultural resource mapping from available resources to identify areas of environmental significance as an initial fatal flaw evaluation, understanding that future DCR efforts will examine the environmental resources at a much greater level of detail.
- 2.10: Using data from the Census 2000, compile and map the minority and low income population data to aid in determining the potential impacts to these populations as transportation improvement projects are recommended by this study.
- 2.11: Using current roadway network information and socioeconomic data for the study area, develop a state-of-the-practice TransCAD travel demand forecast model for the study area. This study effort will expand the travel demand model developed for the Southern Navajo County Sub-Regional Transportation Plan.
- 2.12: Calibrate the TransCAD model by adjusting model parameters to produce accurate comparisons of model-generated volumes with recent year 2006 traffic counts. Evaluate performance statistics and key cutline traffic volumes, and modify the traffic forecast model

## Navajo County Regional Transportation Study – Work Plan

as necessary. Results of the TransCAD model calibration for year 2006 will be documented in Working Paper No. 1.

- 2.13: Perform capacity analyses of major roadway segments to identify existing capacity deficiencies. Planning level capacity thresholds by facility type and width will be used to estimate daily Level of Service (LOS).
- 2.14: Coordinate with ADOT Holbrook, Globe and Prescott engineering districts to identify arterial facilities and/or intersections with potential safety concerns. Where existing data is available, accident rates will be compiled along the existing arterials in the study area. Analyze the last three (2003-2006) years worth of accident data to determine accident rates and identify problem areas. Stratify crashes by number & type, and identify potential mitigation measures to improve safety.
- 2.15: Develop a revised list of issues and special topics to be addressed by the remainder of the Study. This list will supplement the issues enumerated in the Request for Proposals. All key issues will be illustrated on a Key Issues Map and included in Working Paper No. 1.
- 2.16: Assemble an initial list of short-range (five-year) projects based on existing capacity deficiencies, hazardous locations, physical condition of facilities and deficiencies identified during this task. The list will be revised as appropriate during subsequent tasks to reflect modeling results, analysis of alternatives and public/stakeholder input.
- 2.17: Conduct project management coordination activities with Navajo County and ADOT.
- 2.18: Prepare Current Conditions Technical Report

*Products: Current Conditions Technical Report*

### **Task 3.0 Population and Employment Projections**

*Purpose: This task will establish the year 2015, and 2030 population and employment projections used to generate future travel demand forecasts. Key steps include identifying planned and approved developments in the planning study area and reviewing the local agency plans to identify alternative land use options.*

- 3.1: Coordinate with TAC to identify planned and approved developments within the planning area.
- 3.2: Review agency General Plans and development master plans to identify other development options, including infill.
- 3.3: Coordinate with TAC members to develop year 2015 and year 2030 population and employment estimates.
- 3.4: Allocate year 2015 and year 2030 population and employment growth to the revised Traffic Analysis Zone (TAZ) geography.
- 3.5: Prepare Population and Employment Projections Technical Report.
- 3.6: Conduct project management coordination activities with Navajo County and ADOT.
- 3.7: Conduct TAC Meeting No. 1.

*Products: Population and Employment Projections Technical Report. Tabular and graphic summaries showing year 2015 and 2030 population and employment projections*

## Navajo County Regional Transportation Study – Work Plan

### **Task 4.0 Future Roadway Level of Service Conditions**

*Purpose: Identify year 2015 and year 2030 roadway system capacity-related deficiencies.*

- 4.1: Update TransCAD model network with committed (programmed) and planned improvements for the years 2015 and 2030.
- 4.2: Using the future socioeconomic projections and committed and planned street network as inputs to the TransCAD model, conduct traffic assignments for years 2015 and 2030.
- 4.3: Using the model-generated traffic forecasts, estimate the LOS on all major roadway segments. List and describe year 2030 transportation system needs and deficiencies. Deficiencies will be based on analysis of daily traffic volumes versus capacity and overloaded links. City staff and community stakeholders will also be consulted to obtain their views on future transportation deficiencies and possible solutions.
- 4.4: Conduct project management coordination activities with Navajo County and ADOT.
- 4.5: Summarize future roadway conditions in a technical report for inclusion in Working Paper No. 1 – Forecast of Future Conditions.
- 4.6: Conduct TAC Meeting No. 2.

*Product: Future Roadway Conditions Technical Report  
Working Paper No. 1 – Summary of Current and Future Conditions*

### **Task 5.0 First Phase of Public Involvement**

*Purpose: The objectives of our public involvement effort are threefold: 1) educate and inform the public about the project, 2) acquire meaningful input, and 3) inform the public about how their input was reflected in the final product. We believe that using existing communications channels is the most effective means to reach out to the public. We will work closely with the TAC to identify existing channels. We will keep a comment log that shows the date and summary of comments received and a notation as to how that comment is reflected in the final report.*

- 5.1: The Project Team will develop and maintain a project mailing list, produce newsletter articles to coincide with public meetings, and notify the public of the project and public meetings. All announcements, advertisements, displays, and other materials distributed to the public will be approved by the County project manager.
- 5.2: The Project Team will provide graphic support for boards, maps, and/or displays pertinent to meetings. A list of possible subjects includes:
  - Existing Roadway Conditions
  - Population and Employment Growth Projections
  - Projected Transit Demands/Needs
  - Projected Roadway Deficiencies
- 5.3: Conduct project management coordination activities with Navajo County and ADOT.
- 5.4: At the Phase 1 public meetings, the Project Team, led by the Project Manager and other staff, will present the study to stakeholders and the community. Feedback from the public will help in addressing the local and regional transportation needs of the community. Four Phase 1 public meetings will take place over two days. The four public meetings will occur in:
  - Show Low

## Navajo County Regional Transportation Study – Work Plan

- Holbrook
- Winslow
- Heber-Overgaard

5.5: At the conclusion of the first phase, the Project Team will document findings/issues in a summary report. The report will include the press releases distributed prior to the meetings, mailing lists, comments received at the meeting and responses to each comment.

*Product: Summary Report No. 1 - First Phase of Public Involvement*

### **Task 6.0 Special Topics**

*Purpose: The City of Holbrook has identified two special transportation topics to be addressed by this study. The purpose of this task is to specifically address a new Little Colorado River/BNSF Railroad crossing location, and a goods movement plan.*

- 6.1: In consultation with City of Holbrook Staff and the TAC, develop alternative Little Colorado River/BNSF Railroad crossing locations.
- 6.2: Coordinate with BNSF to identify feasible railroad location and to explore potential funding partnerships.
- 6.3: Evaluate the performance of alternative new crossing locations using year 2030 travel demand forecast model to identify a preferred river/railroad crossing location.
- 6.4: Perform planning/concept level crossing feasibility analysis based on the data from this Navajo County SATS study to develop planning level construction costs for the preferred crossing location. This will serve as a foundation for further work efforts if an acceptable crossing location can be identified.
- 6.5: A second special topic is the development of a goods movement plan. This will include identifying freight activity centers within the City of Holbrook as well as sensitive commercial and residential areas including schools. Coordination with ADOT TPD and District Staff to identify existing truck routes will be completed.
- 6.6: In coordination with City of Holbrook Staff and the TAC, the consultant will develop a goods movement plan that will identify primary and secondary truck routes as well as freight activity centers through the study area aimed at improving mobility for freight activity centers while avoiding sensitive community areas.
- 6.7: In coordination with the City of Winslow, conduct evaluations on special topics to be determined by the TAC and the City of Winslow. The special topic evaluations will be consistent with the intent of the SATS work program. If the special topic evaluations are more extensive than intended for this SATS evaluation, a additional scope and fee estimate will be developed for consideration.
- 6.8: Conduct project management coordination activities with Navajo County and ADOT.

*Products: New River/Railroad Crossing Planning Level Feasibility Analysis and Construction Cost Estimate  
Goods Movement Plan Map*

**Task 7.0 Develop Evaluation Criteria & Plan for Roadway Improvements**

*Purpose: To develop locally tailored evaluation criteria to judge the performance and benefit of future roadway improvement programs. Evaluate and prioritize short-, mid-, and long-range alternatives, develop a recommended year 2030 transportation plan, and prepare a financially constrained implementation program to maximum return on investment.*

- 7.1: Select criteria for evaluating the short-, mid-, and long-range alternatives. These criteria will consider:
- Construction cost and/or cost-effectiveness
  - Affordability and funding potential
  - Economic development impact
  - Traffic safety impacts
  - Impact on traffic congestion/operations
  - Natural, physical, and cultural resources
  - Suitability for phased implementation/funding constraints
  - Community support
- 7.2: Using the travel demand modeling tool, develop and test up to three (3) alternative network improvement scenarios for year 2030 and one year 2015 network scenario for the preferred long-range network plan. The number of alternative concepts will vary by the type and location of the deficiency. Critical long-range deficiencies affecting key facilities may require considerations of alternatives involving improvements to existing facilities, development of new roadway corridors, and new freeway access traffic interchanges.
- 7.3: Identify preferred roadway network alternative and develop planning level improvement costs.
- 7.4: Identify operations and maintenance costs, existing revenue sources, and potential alternative funding strategies, with discussion about their revenue potential and limitations of use.
- 7.5: Develop a year 2030 forecast of revenues for transportation improvement projects, based on reasonably expected transportation revenue streams such as the Highway User Revenue Fund (HURF) and development impact fees. The forecasts will take into account the maintenance needs of existing roadways, as well as existing commitments to fund specific projects.
- 7.6: Consult with the TAC and stakeholders to develop an initial list of improvement priorities by timeframe (short-, mid- and long-range).
- 7.7: Develop a financially constrained, short-range Transportation Improvement Program for fiscal years 2009 through 2013. Projects will be listed by recommended year of implementation, subject to available funding. Those projects for which funding has already been committed through local Capital Improvement Programs will be included.
- 7.8: Similarly, develop a financially constrained, long-range Action Plan for fiscal years 2014 through year 2030.
- 7.9: Prepare Access Control Strategies for the communities to use in determining access locations along arterial, collector and local roadway facilities.
- 7.10: Conduct project management coordination activities with Navajo County and ADOT.

## Navajo County Regional Transportation Study – Work Plan

- 7.11: Develop improvement alternatives for TAC initial review and comment; conduct TAC Meeting No. 3.
- 7.12: Prepare Working Paper No. 2 – Roadway Improvement Plan

*Product: Working Paper No. 2 - Plan for Improvements.*

### **Task 8.0 Second Phase of Public Involvement**

*Purpose: Report back to the public and TAC regarding team efforts to date. In turn, this phase will verify that the community's issues and concerns are being addressed by the Project Team.*

- 8.1: Utilizing the mailing list developed in Task 7 the Project Team will inform the public and stakeholders of all upcoming meetings associated with the second phase of public involvement. This may include newsletters, newspaper advertisement and public notices publicized through the County.
- 8.2: The Project Team will develop and produce any needed boards, maps and/or displays pertinent to Phase 2 meetings. A list of possible subjects includes draft recommendations related to:
- Revenue Forecasts
  - Financially Feasible Transit Improvement Recommendations and Phasing
  - Financially Feasible Roadway Improvement Recommendations and Phasing

The information for the public meeting will be presented to the County project manager prior to the open house.

- 8.3: Conduct project management coordination activities with Navajo County and ADOT.
- 8.4: Conduct the Phase 2 public meeting as a public open house. The meeting will include summarizing the information presented at the previous public meeting and presenting the analyses of needs and deficiencies within the study area and the proposed program of short-, mid-, and long-range improvements. Four Phase 2 public meetings will take place over two days. The four public meetings will occur in:
- Show Low
  - Holbrook
  - Winslow
  - Heber-Overgaard
- 8.5: The Project Team will document the process in a summary report. The report will include the press releases distributed prior to the meetings, mailing lists, comments received at the meeting and associated responses to each comment.

*Product: Summary Report No. 2 - Second Phase of Public Involvement*

### **Task 9.0 – Final Draft Reports and Draft Executive Summary**

*Purpose: Prepare final draft report and an executive summary of the entire study including regional analysis and recommendations will also be prepared.*

- 9.1: Compile all review comments and stakeholder input received on Working Papers No. 1 and 2.