

5 Additional Capacity / New Infrastructure

This chapter focuses on the Regular Capacity Program and Corridor Upgrades. Projects covered under this category include adding single occupancy vehicle (SOV) or high occupancy vehicle (HOV) travel lanes to existing highways, building new highways (i.e., extending existing highways, adding frontage roads, etc.), adding new interchanges to existing freeways, adding control-of-access to existing highways, and any atypical project that does not fit within the other project categories.

The Stage 0 studies for the Regular Capacity Program and Corridor Upgrade projects are normally prepared by the Districts, the Road Design Section, and the Transportation Planning Section. The Transportation Planning Section is responsible for checking for completeness and approving the Stage 0 studies before being submitted to the Project Selection Team. The Stage 0 process for each of the mentioned types of projects is as follows.

5.1 Regular Capacity Program and Corridor Upgrade

Regular capacity projects are those that can be reasonably funded under the annual Highway Priority Program, subject to competition with other projects within the same category. Each year, all candidate projects for which Stage 0 studies have been completed will be submitted to the Project Selection Team.

Corridor upgrade projects are capacity projects and will require a Stage 0, feasibility, study. A Stage 0 Preliminary Scope and Budget Checklist and a Stage 0 Environmental Checklist is available to aid in the preparation of the Stage 0 studies. These checklists may be used as an outline in preparing feasibility studies. An example of a completed Stage 0 Preliminary Scope and Budget Checklist can be found at the end of this section. A blank copy of the checklists can be found in the appendix of this manual.

The vast majority of capacity projects in the regular program will require a study using the Stage 0 checklists as a guide. A completed Preliminary Scope and Budget Checklist provides information such as project location, project category, purpose and need, description of existing facility, description of proposed facility, cost estimates, expected funding source(s), etc. Likewise, the Environmental Checklist is used to aid in the preliminary review of potential impacts to the natural and human environment.

Every Stage 0 study shall have a well thought out purpose and need statement. A purpose and need statement indicates why the project is being proposed as well as describing the problem or problems that need to be addressed. This statement provides a basis for selecting reasonable and practicable alternatives for consideration. It can also be an important factor in selecting a preferred alternative.

In order to complete the Stage 0 checklist/study, engineering data will have to be obtained, organized and reviewed. A Stage 0 study may include but is not limited to the following items:

- a. Existing traffic data
- b. Traffic crash data
- c. Existing highway plans (As-Builts)
- d. Utility information
- e. Previous studies and reports
- f. Unit cost data
- g. Map to identify project site
- h. Aerial photography

A geometric layout of the alternative(s) using aerial photography and DOTD's design standards shall be provided along with the Stage 0 study for all projects in the regular program. If right-of-way is required, approximate right-of-way limits and area based on a standard template will need to be established. Both the apparent right-of-way and the required right-of-way shall be shown on the geometric layout.

Preliminary cost estimates for each alternative should be based on unit cost data. The estimates will include the costs associated with engineering design, environmental actions, construction, right-of-way acquisition, utility relocation, and contingencies. District / Headquarters Utility and Real Estate Sections should be involved in the Stage 0 process as to provide a good preliminary estimate for utility relocations and right-of-way acquisitions, respectively.

The Stage 0 Environmental Checklist begins with a series of items to help define the context of the area followed by more detailed items to aid in the identification of potential impacts. Items to be considered include, but are not limited to, social, economic, historic, cultural, recreational, archaeological, noise, air, wetlands, flood plains, endangered or threatened species and/or their habitat and farmland. Also, identify

and define the apparent environmentally sensitive areas, hazardous material sites, and natural man-made constraints within the project's limits using field reconnaissance and aerial photography. A list of websites containing various environmental databases is included along with a general explanation of the relevance of each item in the checklist.

In the Stage 0 study, an alternative will be recommended based on purpose and need, traffic analysis, alignment, cost estimates, environmental impacts, etc. Once Stage 0 has been completed, it must be sent to the Transportation Planning Section for review of completeness before submitting it to the Project Selection Team. The team will then decide which projects proceed to Stage 1, Planning and Environmental, within the respective budget constraints. Projects not selected can be shelved or retained for reconsideration the following year. For further information on the project selection teams and the project selection procedures, refer to the DOTD's "Highway Project Selection Process" manual.

Once the decision is made to proceed to Stage 1, the Program Manager is notified and provided with a copy of the Stage 0 study. It is the Program Manager's responsibility to ensure that a project number is obtained by the appropriate departmental personnel and to make the necessary contacts to initiate Stage 1. The Program Manager is responsible for sending a memorandum to the Environmental Section indicating that the project was selected and approved for further processing through Stage 1. Also, a copy of the completed Stage 0 study should be sent to the appropriate DOTD sections and district.

Any significant changes to the approved project scope or budget must be submitted to the Program Manager for approval. Changes to the budget may need to be brought to the Project Delivery Steering Committee, particularly if the Budget Partition is impacted.

STAGE 0
Preliminary Scope and Budget Checklist

District 62 Parish St. Tammany Route US XX

Control Section XXX-XX Total Project Length (miles) 1.0 miles

Begin Project (CS Log Mile) 0.00 End Project (CS Log Mile) 1.00

Project Category (Safety, Capacity, etc.) Capacity Date Prepared: 09/06/06

A. Purpose and need for the project: To improve the level of service along US XX from CSLM 0.00 to CSLM 1.00. (See Stage 0, feasibility, report)

B. Project Concept

- Description of existing facility (functional class, ADT, number of lanes, etc): urban arterial, 40,000 ADT, 4- 12' lanes divided with 8' paved shoulder, LOS F, R/W 210'. On a 4-lane road, 12,000 ADT is LOS A.
- Major Design Features/Criteria of the proposed facility (attach aerial photo w/concept if applicable):
Widen to 6 lanes and retain raised median
- Design Exceptions: No design exceptions are anticipated to be needed.
- Technical Analyses (traffic analysis, safety analysis, etc): see Stage 0, Feasibility, study
- Alternatives to Project Concept: do nothing, eliminate median and use 7-lane section
- Future ITS / Traffic Considerations: camera system at the intersection of US XX and Boutin Road
- Construction Traffic Management/Property Access Considerations: Maintain 4-lanes during peak periods, maintain access to businesses during normal business hours.

C. Potential environmental impacts (Complete the Stage 0 Environmental Checklist on pages 4-10 to 4-13):
See attached environmental checklist

D. Cost Estimate

• Engineering Design:	<u>\$400,000</u>
• Environmental (document, mitigation, etc.):	<u>\$300,000</u>
• R/W Acquisition: (C of A if applicable)	<u>\$1,200,000</u>
• Utility Relocations:	<u>\$400,000</u>
• Construction (including const. traffic management):	<u>\$10,000,000</u>
TOTAL PROJECT COST	<u>\$12,300,000</u>

E. Expected Funding Source(s) (Highway Priority Program, CMAQ, Urban Systems, Fed/State earmarks, etc.)
Highway Priority Program

ATTACH ANY ADDITIONAL DOCUMENTATION Prepared By: L. Camino

Disposition (circle one): (1) Advance to Stage 1 (2) Hold for Reconsideration (3) Shelve

Stage 0 Environmental Checklist

C.S. XXX-XX Parish St. Tammany
Route US XX Begin Log mile 0.00 End Log mile 1.00

ADJACENT LAND USE: Commercial

Any property owned by a Native American Tribe?

(Y or N or Unknown) If so, which Tribe? N

Any property enrolled into the Wetland Reserve Program?

(Y or N or Unknown) If so, give the location N

Community Elements: Is the project impacting or adjacent to any:

(Y or N) Cemeteries N

(Y or N) Churches N

(Y or N) Schools N

(Y or N) Public Facilities (i.e., fire station, library, etc.) N

(Y or N) Community water well/supply N

Section 4(f) issue: Is the project impacting or adjacent to any:

(Y or N) Public recreation areas N

(Y or N) Public parks N

(Y or N) Wildlife Refuges N

(Y or N) Historic Sites N

Is the project impacting, or adjacent to, a property listed on the National Register of Historic Places? (Y or N) Is the project within a historic district or a national landmark district? (Y or N) If the answer is yes to either question, list names and locations below:

N, N

Do you know of any threatened or endangered species in the area? (Y or N)

If so, which species? N

Does the project impact a stream protected by the Louisiana Scenic Rivers Act? (Y or N)

If yes, name the stream. N

Are there any Significant Trees as defined by EDSM I.1.1.21 within proposed ROW?(Y or N)

If so, where? N

What year was the existing bridge built? N/A

Are any waterways impacted by the project considered navigable? (Y or N) If unknown, state so, list the waterways: N

Hazardous Material: Have you checked the following DEQ and EPA databases for potential problems?

(Y or N) Leaking Underground Storage Tanks Y, Stop and Go Gas Station

(Y or N) CERCLIS Y, nothing found

(Y or N) ERNS Y, nothing found

(Y or N) Enforcement and Compliance History Y, nothing found

If found site, give the name and location: _____

Stage 0 Environmental Checklist

Underground Storage Tanks (UST): Are there any Gasoline Stations or other facilities that may have UST on or adjacent to the project? (Y or N) Y, adjacent

If so, give the name and location: Stop and Go Gas Station (C.S. log mile 0.20) and Hole in the Wall Gas Station (C.S. log mile 0.75)

Any chemical plants, refineries or landfills adjacent to the project? (Y or N) **Any large manufacturing facilities adjacent to the project?** (Y or N) **Dry Cleaners?** (Y or N) If yes to any, give names and locations: N, N, Y, Keep It Clean Dry Cleaners (C.S. log mile 0.90)

Oil/Gas wells: Have you checked DNR database for registered oil and gas wells? (Y or N) List the type and location of wells being impacted by the project. oil/gas wells are not being impacted by this project

Are there any possible residential or commercial relocations/displacements? (Y or N) How many? Y, possibly 2 relocations/displacements

Do you know of any sensitive community issues related to the project? (Y or N) If so, explain N

Is the project area population minority or low income? (Y or N) N

What type of detour/closures could be used on the job? Maintain 4-lanes during peak periods, maintain access to businesses during normal business hours.

Did you notice anything of concern during your site/windshield survey of the area? If so, explain below. N

L. Comino

Point of Contact

(225) 379-1297

Phone Number

9/06/2006

Date

Stage 0 Environmental Checklist

Threatened & Endangered Species Information

<http://www.wlf.louisiana.gov/experience/threatened/speciesfactsheets/>
<http://www.wlf.louisiana.gov/experience/threatened/threatenedandendangeredtable/>
<http://www.wlf.louisiana.gov/experience/threatened/>

LA Wildlife Refuge Information

<http://www.wlf.louisiana.gov/experience/wmas/refuges/>

Louisiana Scenic Rivers Act (R.S. 56:1840-1856)

Louisiana Natural and Scenic Rivers (R.S. 56:1847)

<http://www.legis.state.la.us/lss/lss.asp?doc=104995>

Louisiana Historic and Scenic Rivers (R.S. 56:1856)

<http://www.legis.state.la.us/lss/lss.asp?doc=105004>

<http://www.wlf.louisiana.gov/experience/scenicrivers/>

Significant Tree Policy (EDSM I.1.1.21)

EDSMs can be found on DOTD's intranet site: <http://ladotnet/>

(Live Oak, Red Oak, White Oak, Magnolia or Cypress, aesthetically important, 18" or greater in diameter at breast height and has form that separates it from surrounding or that which may be considered historic.)

LA Historic Sites and Districts

<http://www.crt.state.la.us/hp/nhl/default.htm>

Hazardous Waste Site Information

<http://www.deq.louisiana.gov/portal/tabid/71/Default.aspx>

<http://www.epa.gov/superfund/sites/cursites/index.htm>

<http://www.epa.gov/superfund/sites/npl/la.htm>

http://www.deq.louisiana.gov/portal/Portals/0/permits/ust_facility_owner.pdf

http://www.deq.louisiana.gov/portal/Portals/0/remediation/form_5222_r01.xls

http://www.nrc.uscg.mil/wdbcgi/wdbcgi.exe/WWWUSER/WEBDB.foia_query.show_parms

<http://www.epa.gov/echo/>

DNR Oil & Gas Well Information

http://sonris-www.dnr.state.la.us/www_root/sonris_portal_1.htm

Environmental Justice (minority & low income)

<http://www.fhwa.dot.gov/environment/ej2000.htm>

Demographics

<http://www.louisiana.gov/wps/wcm/connect/Louisiana.gov/About+Louisiana/Demographics%3A+Census+Info/Census+2000+Information/>

<http://www.census.gov/>

Water Wells

<http://www.dotd.state.la.us/intermodal/wells/home.asp>

FHWA's Environmental Website (Just a good reference for understanding NEPA)

<http://www.fhwa.dot.gov/environment/index.htm>

Additional Databases Checked

Other Comments:

Stage 0 Environmental Checklist

General Explanation:

To adequately consider projects in Stage 0, some consideration must be given to the human and natural environment which will be impacted by the project. The Environmental Checklist was designed knowing that some environmental issues may surface later in the process. This checklist was designed to obtain basic information, which is readily accessible by reviewing public databases and by visiting the site. It is recognized that some information may be more accessible than other information. Some items on the checklist may be more important than others depending on the type of project. It is recommended that the individual completing the checklist do their best to answer the questions accurately. Feel free to comment or write any explanatory comments at the end of the checklist.

The Databases:

To assist in gathering public information, the previous sheet includes web addresses for some of the databases that need to be consulted to complete the checklist. As of October 2006, these addresses were accurate.

Note that you will not have access to the location of any threatened or endangered (T&E) species. The web address list only the threatened or endangered species in Louisiana. It will generally describe their habitat and other information. If you know of any species in the project area, please state so, but you will not be able to confirm it yourself. If you feel this may be an issue, please contact the Environmental Section. We have biologist on staff who can confirm the presence of a species.

Why is this information important?

Land Use? Indicator of biological issues such as T&E species or wetlands.

Ownership? Tells us whether coordination with tribal nations will be required.

WRP properties? Farmland that is converted back into wetlands. The Federal government has a permanent easement which cannot be expropriated by the State. Program is operated through the Natural Resources Conservation Service (formerly the Soil Conservation Service).

Community Elements? DOTD would like to limit adverse impacts to communities. Also, public facilities may be costly to relocate.

Section 4(f) issues? USDOT agencies are required by law to avoid certain properties, unless a prudent or feasible alternative is not available.

Historic Properties? Tells us if we have a Section 106 issue on the project. (Section 106 of the National Historic Preservation Act) See <http://www.achp.gov/work106.html> for more details.

Scenic Streams? Scenic streams require a permit and may require restricted construction activities.

Significant Trees? Need coordination and can be important to community.

Age of Bridge? Section 106 may apply. Bridges over 50 years old are evaluated to determine if they are eligible for the National Register of Historic Places.

Navigability? If navigable, will require an assessment of present and future navigation needs and US Coast Guard permit.

Hazardous Material? Don't want to purchase property if contaminated. Also, a safety issue for construction workers if right-of-way is contaminated.

Oil and Gas Wells? Expensive if project hits a well.

Relocations? Important to community. Real Estate costs can be substantial depending on location of project. Can result in organized opposition to a project.

Sensitive Issues? Identification of sensitive issues early greatly assists project team in designing public involvement plan.

Minority/Low Income Populations? Executive Order requires Federal Agencies to identify and address disproportionately high and adverse human health and environmental effects on minority or low income populations. (often referred to as Environmental Justice)

Detours? The detour route may have as many or more impacts. Should be looked at with project. May be unacceptable to the public.