

Introduction

On June 9th, 1998 the landmark Transportation Equity Act for the 21st Century (TEA-21) was signed. The Bill is a \$203 billion highway and mass transit Bill that will pave roads and fill potholes from Alaska to Maine.

The Transportation Equity Act for the 21st Century calls for spending \$167 billion over the next six years to build and maintain highways, bridges and railways around the country and \$36 billion for mass transit programs like subways and buses.

TEA-21 builds on the initiatives established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which was the last major authorizing legislation for surface transportation. This new Act combines the continuation and improvement of current programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment as we provide transportation, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

TEA-21 is a balanced approach; it invests not only in highways and bridges but also in transit systems, intermodal projects and advanced technologies such as Intelligent Transportation Systems.

TEA-21 provides federal funding, guidelines and requirements for all transportation projects seeking federal funding. TEA-21 is comprised of various funding programs; the Council of Mayors receives its federal transportation funding through the Surface Transportation Program (STP). The Surface Transportation Program (STP) provides funding to the state departments of transportation. In Illinois the Illinois Department of Transportation (IDOT) designates a portion of this funding for the Council of Mayors program. Northeastern Illinois is comprised of eleven regional Councils of Mayors and the City of Chicago. Each local Council oversees the planning and programming of these STP funds within their own region.

The Southwest Council of Mayors is one of the eleven Councils receiving a portion of the State's STP funds. The Southwest Council of Mayors is comprised of twenty-one municipalities. Currently only twenty municipalities are eligible for STP funding through the Southwest Council. (Attachment A)

Each year the Southwest Council receives federal STP funds to be programmed by the Council for transportation projects within the Council's region. Southwest Council municipalities apply for the Council's STP funds by contacting the Council's staff and completing the appropriate application.

The Southwest Council of Mayors has developed a set of project selection guidelines. These guidelines set the parameters by which the Southwest Council selects the projects submitted by Council municipalities to receive federal STP funding. Among other considerations, the guidelines must demonstrate the close link between TEA-21 and the Clean Air Act Amendments (CAAA).

Chapter One

Understanding The Surface Transportation Program (STP) Process and Knowing The Players In The Process

Several agencies in northeastern Illinois participate in the programming and implementation of local transportation improvement projects. These agencies are the Chicago Area Transportation Study (CATS), the CATS' Council of Mayors, the Illinois Department of Transportation (IDOT) and the Southwest Council of Mayors.

A. Chicago Area Transportation Study

The Chicago Area Transportation Study (CATS) is designated by the Governor of the State of Illinois as the Metropolitan Planning Organization (MPO) for northeastern Illinois. CATS is primarily a planning agency and does not sponsor or undertake any transportation improvement projects. Its function as the MPO is to serve as a forum for coordinating the planners, funding agencies, transportation implementers and local elected officials involved in overseeing the region's transportation system. The agencies and implementers participate cooperatively in CATS' Policy Committee and Work Program Committee. The Policy Committee, the actual MPO designate, meets quarterly and is comprised of executive level representatives of various agencies and government bodies. The Policy Committee is chaired by the Illinois Secretary of Transportation. The Work Program Committee is comprised of staff-level personnel and meets on a monthly basis.

B. CATS Council of Mayors

Local Surface Transportation Program (STP) projects are selected and programmed by eleven Regional Councils of Mayors throughout the six-county Chicago region. The CATS Council of Mayors is the umbrella organization for all eleven Regional Councils. The Executive Committee of the Council of Mayors which is comprised of two Mayors from each Regional Council meets approximately once a month to address STP policy issues, other transportation issues and Planning Liaison issues.

C. Illinois Department of Transportation

The Illinois Department of Transportation (IDOT) is responsible for processing projects in the Southwest Council of Mayors' Surface Transportation Program (STP). IDOT's procedures for processing Southwest Council's STP projects are described in the *Federal-Aid Procedures for Local Highway Improvements Manual*. Bureau of Local Roads and Streets staff from IDOT District One are assigned to coordinate projects submitted by Southwest Council Member Municipalities. The Central Office of IDOT in Springfield is responsible for the final review and approval of all components of a STP project before it can be published for contract bidding.

D. Southwest Council of Mayors

The Southwest Council of Mayors is a Regional Council comprised of Chief Elected Officials of twenty-one municipalities designated to select and program local Surface Transportation Program (STP) projects in the southwest Cook County region. Any eligible Southwest Council of Mayors Member Municipality (Appendix A) can apply for funding for an eligible STP project. Each year the Council develops and approves an Annual Element of STP projects for funding in the upcoming fiscal year, as well as a Multi-Year Program consisting of projects programmed for the next four fiscal years. The Southwest Council of Mayors gives final approval to the Annual Element and the Multi-Year Program prior to its submission to the CATS Work Program Committee.

Transportation Improvement Program (TIP Process)

One of CATS major responsibilities as the Metropolitan Planning Organization (MPO) is the development of the Transportation Improvement Program (TIP) for

northeastern Illinois. The TIP is a five-year compilation of all federal-aid transportation projects programmed by transportation agencies in the six county region, including the Southwest Council of Mayors Surface Transportation Program (STP). The TIP is comprised of a one year Annual Element for funding projects in the current fiscal year and a four-year Multi-Year Program of planned transit and highway projects. The region's TIP is developed by CATS' Work Program Committee based upon the programs submitted from each of the individual agencies, with final approval required from the CATS' Policy Committee. The entire compilation of transportation improvements are modeled and evaluated for net impact on air quality to ensure that regional air quality goals are being met.

Federal legislation requires submittal of the TIP's Annual Element, the Multi-Year Program and air quality conformity testing results to the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for their review and approval. After federal approval has been received, the region's STP is submitted for inclusion in the development of the State's Transportation Improvement Program (SIP).

If there are any changes to a project programmed in the Southwest Council's approved STP program, the Council must be notified in writing and the Council's Membership must approve these changes. Program changes will then be submitted to CATS to request changes be made to the TIP. This action requires approval by the Work Program Committee and in some cases the Policy Committee.

Chapter Two

Southwest Council of Mayors STP Policies and Procedures

Project Proposals

Any Member of the Southwest Council of Mayors may propose a project to be funded through the STP program, provided:

- A. The project is on an STP eligible route, as determined by the Southwest Council of Mayors, CATS and IDOT.

- B. The project is an STP eligible project type as specified in TEA-21 and on the Southwest Council of Mayors eligible project list.
- C. The project sponsor can fund the required local match.
- D. The project sponsor completes a Project Application. (Attachment B1 & B2)
- E. The project location is within the boundaries of the Southwest Council of Mayors (the geographic area used to determine the STP funding allocated to the Southwest Council of Mayors).

Any transit agency that wishes to propose a project must find two municipal co-sponsors.

Eligible Routes

The routes eligible for STP funding should be those routes that promote regional and/or subregional travel. STP routes must serve more than a local access function. In order to be eligible for STP funding, the route involved must be included on the STP (FAU) System. A list of STP (FAU) System routes can be found in Attachment C.

A process for adding new routes to the STP (FAU) System has been established and is provide in Attachment D.

Eligible Projects

The improvement of STP System routes requires adherence to federal and state standards and policies. For example, the simple resurfacing of a STP System route is not possible unless the completed project meets federal/state standards. The list of STP eligible projects approved by the Southwest Council of Mayors includes a number of project types that would improve air quality.

A. Eligible Highway Projects

The following are general types of highway projects eligible for STP funding as part of the Highway Component:

- Rehabilitation, reconstruction and restoration
- Road widening/Add lanes
- Intersection improvements
- Traffic signal improvements

A detailed listing of eligible highway projects is provided in Attachment E.

B. Transportation Control Measures (TCMs) Projects

The following are general types of TCM projects that are considered to be eligible for STP funding as part of the TCM Component:

- Transit improvements
- High-occupancy vehicle (HOV) programs
- Commuter parking
- Traffic flow improvements (including signal interconnects)
- Pedestrian/Bicycle facilities

A detailed listing of eligible TCM projects is provided in Attachment F.

The Council encourages projects that qualify as Transportation Control Measures (TCMs) to be submitted for funding consideration. TCMs are projects that encourage modes of transportation other than the single occupant vehicle or improve the efficiency of a roadway so that emission reductions are achieved.

Project Selection Process

Project applications must be submitted to the Council staff by January 15th, 1999. The Council staff will review each project proposal for completeness. All complete project applications will then be reviewed and ranked using the current ranking system by the Council's Transportation Committee. Each project will receive a total point value, which will be used to prioritize projects.

The highest ranked projects will be placed on a five-year guaranteed funding list. The number of projects that will be placed on the list will be constrained by the amount of STP funds projected to be available to the Southwest Council of Mayors over the three year time period.

Once a project is on this list, it will be funded so long as:

- The five-year time period does not expire.
- The cost of the project does not increase by more than 20%.
- An annual project update is submitted to Council staff.

Once a project is on the five year guaranteed funding list, it will be funded on the basis of “first ready – first funded”. Projects that do not rank high enough for the three year guaranteed list will be placed on a multi-year A list (MYA).

Funding

Phase I, II and III Engineering and Construction are eligible for STP funding through the Southwest Council of Mayors. The match ratio for a STP funded project is 70% federal funds and 30% local funds. The maximum amount of federal funding for any single component of a project is \$1,000,000. Any federal amount exceeding \$1,000,000 is the responsibility of the local municipality.

Right-of-way acquisition costs are not eligible. Right-of-way acquisition will be a 100% local responsibility and must be accomplished in accordance with federal land acquisition requirements.

Non-Participatory STP Costs

Non-participating costs are those which are paid 100% by a municipality or other agency and are not included in the STP (federal) portion of a project’s cost. There are two reasons why an item may be considered non-participating: 1) the item is not eligible for STP funding (*required*), or 2) the item has been identified for full funding by the sponsor or other agency (*optional*), such as an item with low traffic benefits. The purpose of the *optional* non-participating costs typically is to increase a project’s score in the project evaluation and project selection process. Note that along with the cost of a non-participating item, any benefits derived from that item will be removed from the project evaluation and project selection process.

Policy On Funding Cost Increases

Cost increase in guaranteed projects pose difficulties for maintaining a fiscally constrained STP program. Project sponsors must inform Council staff of any changes in project cost, as soon as the information becomes available. In addition, project sponsors must inform Council staff of any cost increase beyond 20% of the original cost.

Flexibility

Any municipality may request that the Southwest Council of Mayors consider an exception from the above STP policies. Any request for an exception must be made in writing to Council staff so that the request can be placed on the next Council meeting agenda.

Project Selection

The Southwest Council of Mayors will approve a list of projects, based on project ratings, STP funding marks and other factors they may wish to consider. Council staff will provide CATS and IDOT with the necessary information for inclusion of the approved projects in the Transportation Improvement Program (TIP).

A meeting with the project sponsor, Council staff, IDOT and any other affected agencies will be held to identify and discuss critical or unusual problems.

The project sponsor will complete and submit a *Proposed Project Schedule* as found in Attachment H.

The following criteria shall be considered by the Council's Transportation Committee in formulating their recommendations for Surface Transportation Program projects:

1. Traffic Volume
2. Regional Transportation Significance
3. Safety
4. Intergovernmental Importance
5. Air Quality Benefits
6. Pavement Condition Rating
- 7a. Level of Service (for projects which are, or contain, intersection improvements)
- 7b. Volume over capacity ratio (for non-intersection projects)
8. Transportation Control Measure Components
9. Project Readiness

Points System For Ranking Highway STP Projects

1. Traffic Volume

AADT > 40,000	20
AADT 25,000 – 39,999	15
AADT 15,000 – 24,999	10
AADT 5,000 – 14,999	05
AADT < 5,000	00

An intersection improvement project shall receive the point total for both roads it serves, divided by 2. If the traffic volume of a roadway changes within the project's limits, the volume which covers the greatest distance shall be used.

2. Regional Transportation Significance

Strategic Regional Arterial	20
Other/Minor Arterials	15
Collectors	10

3. Safety

The averages of the last three-year's accident reports are to be used and compared against the IDOT average for that type of roadway. The project must address the accident situation and be reasonably expected to lower the accident rate to qualify for safety points. (Statistics are listed as per million miles traveled.)

Roadways

	2 Lane Road	4 Lane Road	PTS
125% of IDOT Avg.	8.27	8.35	15
76% - 124% of IDOT Avg.	6.62	6.68	10
51% - 75% of IDOT Avg.	4.96	5.01	05
50% or less of IDOT Avg.	3.31	3.34	00

Intersections

125% of IDOT Avg.	8.006	12.944	15
76% - 124% of IDOT Avg.	6.405	10.35	10
51% - 75% of IDOT Avg.	4.804	7.766	05
50% or less of IDOT Avg.	3.203	5.178	00

4. <u>Intergovernmental Importance</u>	
Projects sponsored by 3 or more jurisdictions	15
Projects sponsored by 2 jurisdictions	10

A project sponsor must contribute financially to the portion of the project for which funding is sought.

5. <u>Air Quality Benefits</u>	
Projects which eliminate automobile trips	20
Projects that reduce vehicle miles traveled	15
Projects which reduce emissions	10
Projects with seasonal air quality benefits	05
Projects that are air quality neutral	00
Projects with negative air quality effects	- 05

6. <u>Pavement Condition</u>	
0.0 – 4.5 Poor	15
4.6 – 6.0 Fair	10
6.1 – 7.5 Good	05
7.6 – 9.0 Excellent	00

7a. <u>Level Of Service (LOS)</u>	
Existing LOS of F	20
Existing LOS of E	15
10 – Year Projected LOS of E/F	10
Existing LOS of D	05
Existing LOS A-C	00

To qualify for Level of Service points, the project must reasonably be expected to address the existing or projected congestion.

7b. <u>Volume/Capacity</u>	
126% to 150% Over Capacity	15
101% to 125% Over Capacity	10
76% to 100% Over Capacity	05
Up to 75% of Capacity	00

To determine V/C points, the volume of a roadway is divided by its design capacity a project can earn either LOS or V/C points, but not both.

8. <u>Transportation Control Measure Component</u>	
Each TCM within project	05
9. <u>Project Readiness</u>	
Ready for letting in less than 6 months	15
Ready for letting in 6-12 months	10
Ready for letting in 12-24 months	05
More than 24 months	00

Chapter Three

Overview Of The STP Project Implementation Process

Once the Council and CATS have programmed a project, work can begin on engineering the improvement. To utilize STP funds, project design and construction must be in accordance with IDOT and Federal Highway Administration (FHWA) standards and criteria.

Public informational meetings and formal public hearings should be utilized throughout the course of the project to facilitate community understanding of the project, as well as comply with State and Federal rules and regulations, where applicable. For projects requiring land acquisition a formal public hearing process is required.

STP project implementation is a very involved and complicated process consisting of the following key steps:

1. Project Application and Prioritization
2. Project Inclusion on Annual Element or Multi-Year Program
3. Early Coordination Meetings
4. Consultant Selection
5. Environmental and Design Studies/Project Development Report
6. Illinois Project Review System (A-95)
7. IDOT/FHWA Review and Approval of Project Report
8. Public Hearing Requirements
9. Design Approval/Joint Agreement
10. Land Acquisition
11. Plans, Specifications and Estimates (P, S, & E)

12.Approval/Final Contract Plans

13.Final Processing for Letting/Award of Contracts

A brief description of each step is summarized below. This summary does not and should not substitute for a complete review of the *Federal-Aid Procedures Manual for Local Highway Improvements* published by the Illinois Department of Transportation, as well as on-going liaison with IDOT-Local Roads Staff.

Project Application and Prioritization

Project applications must be submitted as directed by the Council to be considered for STP funding. The application process requires that project sponsors contact IDOT-Local Roads Staff to review the project application, especially with regard to preliminary cost estimates, design and warrants for soil and/or pavement tests. Project applications will be evaluated and prioritized as described in Chapter Two.

Early Coordination Meetings

The initial IDOT review of a sponsor's project in the application process is one example of early coordination. Coordination can be achieved through informal meetings and correspondence with the appropriate agencies and is designed to pinpoint potential problems early on, before they lead to delay at a more critical step in the process. These meetings address such issues as IDOT and FHWA design expectations, potential environmental impacts, related social or economic impacts, etc. Further coordination should occur before engineering consultant selection so that Requests for Proposals can include the proper specifications for scope of study and consultant qualifications.

A formal meeting between the project sponsor, IDOT-District One Local Roads staff and Council staff should proceed the start of preliminary engineering for all STP projects.

Consultant Selection

STP projects submitted through the Southwest Council are bound by the IDOT requirements for consultant selection. IDOT staff can provide valuable insight and guidance in this process; their procedures are designed to make consultant selection as smooth and timely as possible. These procedures are covered in Chapter 4 of *Federal-Aid Procedures for Local Highway Improvements*. Also, a

publicly employed resident engineer is required to be “in responsible charge” of construction for federally funded projects.

Because the STP process is so specialized and time consuming, it is highly recommended that municipalities consider hiring a consultant, particularly one knowledgeable of the federal process and IDOT requirements. This outside expertise may result in a more timely completion of a STP project and minimize delay.

Environmental And Design Studies/Project Development Report

In-house engineering staff or a consultant should be brought on board as soon as possible after the STP project has received approval to begin Phase I Engineering. The project will be presented at the monthly IDOT/FHWA Coordination meeting to discuss the level of environmental processing. In the case of the typical STP project, this primarily involves completion of the appropriate design and environmental studies to develop a Project Development Report (PDR), with the anticipation of a Categorical Exclusion classification for environmental impact.

Specific elements of Phase I Engineering include:

- *Data Inventory*
Review relevant studies, traffic and accident history, current land use and zoning information, FEMA and other floodplain information, etc.
- *Soils Investigations, Topographic Survey, and Drainage/Hydraulic Studies*
Perform a topographic survey establishing physical features, centerline of right-of-way and right-of-way limits, and natural drainage features and patterns. Soil borings, pavement deflection tests, or other appropriate field tests should be done to establish the suitability and condition of supporting soils and pavement as part of the project. A preliminary drainage plan should be prepared addressing natural and man-made drainage conveyances, location and design of inlets and outfalls, flood-plain encroachment and compensatory storage, etc. Federal participation in drainage is limited to twice the width of right-of-way.
- *Environmental Studies*
Inventory all significant social, economic and environmental features or conditions which may be impacted by the project, including air quality,

traffic and construction noise, wetlands and other ecologically sensitive features, adjacent homes and businesses, etc.

- *Preliminary Design Studies*
Develop alternative plans, where appropriate, including a preferred alternative, identifying pavement cross-section, utility location/relocation, streetlights and traffic signals, etc. Preliminary cost estimates would be developed at this time. A Bridge Inspection Report and type, size and location (T, S and L) drawing must be prepared where bridge structures are involved.
- *Project Development Report*
For improvements likely to be classified as a “categorical exclusion”, a Project Development Report must be prepared which summarizes the major elements described above.

Projects such as new interchanges, bypasses, and those involving opposition or substantial controversy on environmental grounds will generally require preparation of an Environmental Assessment Report or combined Environmental Assessment/Location and Design Report. Projects which have the potential to be processed as CEs, but which generally have been processed as EAs in the past (i.e., add lanes projects), are eligible for the Environmental Class of Action Determination (ECAD) procedures. These procedures do not constitute a new environmental processing category. Rather, they lead to a decision on whether actions will qualify for processing as CEs or will require an EA or EIS.

Illinois Project Review System

In accordance with Circular A-95, FHWA formerly required that State and substate (regional) clearinghouses review projects in order to qualify for federal funding. Although federal requirements for A-95 no longer exist, a Presidential Executive Order left continuation of such review system up to each state. For those states wishing to maintain such a review system, a mechanism for channeling local input from this system to the appropriate Federal agencies was maintained.

Illinois is one of the states that has “continued” the old A-95 review programming, under what is now called the Illinois Project Review System. The Northeastern Illinois Planning Commission (NIPC) is the Substate Clearinghouse agency for the

Chicago/Six-County area. All STP projects are required to go through the clearinghouse review in this region. A determination may be made by NIPC, however, that certain minor improvement types (i.e., resurfacing) do not require a full review of this process.

Generally the following two stages of review are adequate for most projects:

- *Early Warning Stage*
Early Warning notification is currently done for projects involving a new road alignment or where the scope of work at this early stage is undetermined. If required, this early review should be started as soon as possible after the project is included in the Council's STP Program. This allows a quick review and incorporation of resultant comments and suggestions into the Phase I Engineering stage of the project. Serious problems can therefore usually be resolved prior to the design state notification that follows.
- *Design Stage*
Additional elements required for the project documentation at this stage of review are a more complete description of work, a summary of comments from public hearing or meetings on the project, a summary of contacts and responses of various public agencies on the project. This review is required and must be completed prior to design approval for the project.

Applications for clearinghouse review should include a project summary, site maps and a standard Form 424 for all proposals where Federal assistance is sought. Requests for forms and additional information can be directed to NIPC's Project Review Section. It is recommended that only a design stage notification be done for all projects. An *Early Warning* should only be done for special cases, such as a new roadway.

IDOT/FHWA Review And Approval Of Categorical Exclusions

Based on the preliminary scope of work for a project, comments from the Illinois Project Review System and their own review, FHWA will evaluate the level of environmental study which must be done in accordance with FHWA rules and regulations and consistent with the National Environmental Policy Act (NEPA).

A project may fall into one of three categories of potential environmental impact and corresponding intensity and review of environmental studies:

1. *Categorical Exclusions (CE)*

Actions which individually or cumulatively do not have a significant effect on the environment. In certain unusual cases, projects given a Categorical Exclusion may still require an Environmental Assessment because of unique or unusual factors involved with what may, in all other respects, be a routine project.)

2. *Environmental Assessment (EA)*

A project in this category is of such magnitude that historically; the potential for environmental impact is present. The findings of this type of study will determine if an Environmental Impact Statement must be prepared or if a Finding of NO Significant Impact (FONSI) can be granted. Examples of projects in this category include interchanges, bypasses and those involving opposition or substantial controversy on environmental grounds.

3. *Environmental Impact Statement (EIS)*

The most detailed review and of any environmental study, emphasizing alternatives analysis, including the No-Build Alternative and measures to mitigate harm or negative impact. An EIS will be required if a project is expected to have significant adverse impact on the natural, historic or cultural resources, flood plains or wetlands and disruption to homes and businesses. In general, projects requiring an EIS will be of such scope or magnitude to generate area-wide controversy.

Projects which have the potential to be processed as CEs, but generally have been processed with EAs in the past (i.e., add lanes projects) are eligible for Environmental Class of Action Determination (ECAD) procedures. The implementation of the ECAD procedures does not change any of the procedures or requirements for EISs, EAs or CEs; it leads to the decision on whether an eligible project should be processed as a CE or with an EA or EIS and provides a structure for evaluating and documenting the basis for that decision.

Concurrence with a Categorical Exclusion is considered using the Project Development Report as the basis for review. District I review will normally take 2-3 weeks, with Springfield Bureau of Local Roads and Streets requiring another 2-3 weeks. Sign off by the District Engineer and the BLRS Engineer are required. FHWA review and/or concurrence is generally not required for typical Categorical

Exclusion Projects unless unusual conditions or circumstances are involved (e.g., local opposition/controversy, off-project detours, etc.). Categorical Exclusion projects of a minor nature (e.g., resurfacing) may receive design approval simultaneously with concurrence on the Categorical Exclusion designation. This will shorten the overall schedule for implementing STP projects by six to eight weeks.

Public Hearing Requirements

Closely related to the level of environmental study required is the corresponding degree of Public Involvement. Minimum requirements for Public Involvement are clearly established by the FHWA. A public hearing is required for all Federal-Aid projects that involve the preparation of an Environmental Impact Statement. Public hearings are also required for Categorical Exclusions (CEs) and Environmental Assessments (EAs) when significant amounts of right-of-way are required (ten or more property owners), significant adverse effects on abutting real property is expected, or there is known opposition. Public hearings cannot be advertised until IDOT and FHWA concurrence with a Categorical Exclusion, or “Finding of No Significant Impact” for Environmental Assessment projects, has been given. Publishing two notices of opportunity for public hearing may satisfy public hearing requirements. Guidance on the advertising of public hearings and conduct of meeting is provided in IDOT’s *Federal-Aid Procedures for Local Highway Improvements Manual*.

Design Approval

When Design Approval does not occur simultaneously with Categorical Exclusion concurrence, it will generally require two to three weeks for each the District Office and the Central Bureau of Local Roads and Streets to review and approve the project. FHWA approval may be required in cases where there is public controversy, limited environmental impact, deviation from design standards and other non-routine aspects to the project. Projects involving bridge structures will require additional time to process through the Springfield office. If right-of-way is required, the acquisition process may not be started until after Design Approval of the project. Refer to the Federal-Aid Urban Acquisition Procedures prepared by IDOT-District One for more information on right-of-way plans, appraisal, etc.

Plans, Specifications and Estimates

Upon Design Approval, project plans, specifications and estimates (P, S & E) are to be prepared. This Phase II Engineering will provide more detailed information necessary to construct the project and will incorporate environmental and design commitments made at earlier stages of project development (e.g., mitigating impact measures, revised lane widths based on IDOT/FHWA review, etc.). They, in effect, become the basis for contract bids at a later date.

P, S & E submittals will be reviewed and approved by the District I Office of IDOT. (Prior to P, S & E approval requirements for environmental analysis and reports, public involvement and design approval must be completed.) The elements of this phase of project development are:

- *Plans*
Plans are working drawings showing the location, character and dimensions of the proposed work, including: layouts, profiles, structures, cross-section and other details. As such, the term Plans will actually incorporate the following specific documents: Plan and Profile; Bridge Plans; Traffic Control Plans; Cross-Sections; Right-of-Way Plans and Railroad/Utility Plans.
- *Specifications*
“Specifications” are the detailed instructions for construction highway projects, including a description of the work, materials, construction materials, method of measurement, basis of payment and the pay item for each item of work. Specifications shall conform to the Standard Specifications for Road and Bridge Construction published by IDOT.
- *Estimates*
An “estimate” is the predicted project cost at the time of receipt of bids, developed from knowledge of the costs for materials, labor and equipment required to perform the necessary work. Incidental and overhead costs, as well as a statement of profit are also included in the project cost estimate. Standard forms are available from each District Office for use in preparing cost estimates for pay items normally encountered during project construction.

Final Processing For Letting/Award Of Contracts

This is the most critical step of the entire process. All of the preceding steps, plus those enumerated below, are brought together and processed so that the construction estimates (including any special provisions), agreements, bid advertising and contract award may be completed. Prior to this step, the following paperwork must be completed: right-of-way maps, certification of right-of-way and joint agreement.

A joint agreement between the State and local agency (municipal or county) involved will be required for all Surface Transportation Program (STP) improvements. Participation by the local agency may be a contribution of services or money; for example, preliminary engineering, right-of-way cost, and/or construction costs are generally the responsibility to some extent of the local agency. The joint agreement should also resolve questions of maintenance, parking, storm sewer pollution, encroachment, approval of plans, etc. IDOT, in all cases, will prepare the preliminary and final draft of the joint improvement agreement. The final agreement will be forwarded to the municipality for execution by proper officials and returned to IDOT for execution by State officials. In order for an improvement with attached ordinances must be fully executed and plan approval received, from six to seven weeks prior to the scheduled letting date.

Projects are let and awarded by IDOT on the basis of competitive bidding. IDOT will advertise proposed projects in its Service Bulletin. This Bulletin is the official publication and sole criterion of bids for Federal-Aid and State roadwork and is sent to each contractor on IDOT's pre-qualified list. At the time and place specified in the State's Service Bulletin, the total amount of each bid is read aloud to those present. The award of contract will be made within 45 days after the letting to the lowest responsible qualified bidder where the proposal complies with all prescribed requirements. A concurrence in the low bid is now part of the joint agreement. When a project is awarded, a contract is prepared and sent to the low bidder for execution in accordance with the Bureau of Design "Instructions for Executing Contracts and Bonds".

As soon as practicable after a contract is awarded, the District Office shall arrange a conference with the contractor and local agency prior to execution of the work (Standard Specification – Article 108,03). The purpose of this "pre-construction" conference is to discuss the plans and specifications of the project, unusual

conditions, methods and schedule of operation, mobilization of equipment, labor requirements, traffic and Federal requirements.

The following items will be discussed at the meeting:

- Order of work (progress schedule)
- Utilities and railroads
- Sub-contractors and agents
- Records and reports
- Traffic control and safety
- General construction discussion

Completion of each of the steps discussed will lead up to actual construction of the project. Again, applicants are referred to Local Roads staff from District I and the *Federal-Aid Procedures Manual for Local Highway Improvements* for specific guidance in each of these steps.

Highlights Of STP Design/Improvement Standards

All STP projects must be designed according to state/federal standards as contained in documents such as the *Federal-Aid Procedures for Local Highway Improvements* and the IDOT Design Manual. Sponsors submitting STP project applications should review and familiarize themselves with the design standards contained in these documents before determining preliminary project design or cost estimates. Submittal of projects not designed according to these standards may result in unanticipated cost increases, delay in project implementation and even removal from the STP program. To prevent such circumstances from arising, early coordination with IDOT is essential.

Following is a list of IDOT/FHWA design standards and requirements that are commonly overlooked in the development of project design:

- A 30-foot minimum (face-to-face of curb) cross-section for two-lane urban collector streets.
- Storm sewers designed for a 10-year storm; where storm sewer outlets are restricted a design frequency less than 10 years may be approved.
- Storm sewers must be an integral part of the highway improvement and should be documented as such. STP funding can be utilized only for storm sewer and other drainage work that is with the road right-of-way.

- Storm sewers must be built entirely within the limits of the project, except in the case of outfalls.
- Angle parking will generally not be approved unless an auxiliary lane is provided to prevent conflict between parking maneuvers and through traffic.
- IDOT and the Federal Highway Administration will look beyond the immediate scope or limits of the project in order to incorporate solutions to other safety or operational problems currently experienced. This should be anticipated in the design of the project.
- Project design should be based on a twenty-year design traffic projection.
- Twelve-foot lane widths are generally required for widening of urban streets. Where right-of-way is restricted, lane widths of a minimum of 10 feet will be considered on resurfacing projects.
- High accident locations must be identified and improved on all projects. Wet weather accident analysis is also required.
- Pavement overlays should be based on the structural adequacy of existing pavement.
- Early coordination with utility companies is essential.
- Pavement markings, signing, striping and traffic control on resurfacing, reconstruction, widening and other projects must conform to the Illinois Manual on Uniform Traffic Control Devices.
- Road cross-sections must be continuous for STP projects.
- Railroad-highway grade crossings must be included (if not improved) in the project scope of work.