

# ★ planning advisory service

AMERICAN SOCIETY OF PLANNING OFFICIALS

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## CAPITAL IMPROVEMENT PROGRAMMING - SOME CONSIDERATIONS\*

Capital improvement programs have been prepared in a substantial number of the PLANNING ADVISORY SERVICE subscribing communities and states. Cities such as New York; Philadelphia; San Francisco; Providence; Evanston, Illinois; Montclair, New Jersey; and Winchester, Massachusetts, (to name only a few) have assigned to the planning agency as one of its major responsibilities, the preparation of a capital improvement program. Similarly, states and territories, for example, Maryland, Michigan, Arkansas, and Puerto Rico, have undertaken such programming. One of our members has just written to us explaining the reasons why he does not feel the planning commission in his community should undertake the responsibility of preparing a capital improvement program; the problems he raised merit widespread attention. Agencies responding to PLANNING ADVISORY SERVICE's questionnaire on preferences for future bulletins also indicated a need for discussion of some of the considerations involved in capital improvement programming.

### The Need for Capital Improvement Programming

Briefly, capital improvement programming is the scheduling of selected physical plans and facilities for a community over a certain period of time. These improvements are based on a series of priorities, according to the need or desire for such improvements, and according to the community's present and anticipated financial standing. Assuming that a community has only limited resources to devote to improving its physical plant, the programming of its public works is a process through which decisions may be made on what public works are most important to the community, and when.

By law, municipalities and states are prevented from adopting official operating budgets for a period of greater than one or two years. The capital improvement program permits a long range forecast of certain types of expenditures which can be a guide to the specific content of each year's officially adopted budget.

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The capital improvement program is generally reconsidered and readopted each year to permit a re-evaluation of anticipated expenditures, and to permit adjustment in light of items such as changed financial conditions, technology, costs, material and manpower availability. (Thus, the term, "annual capital budget," is frequently used.) It is also extended by proposals for an additional year. This process of constant re-evaluation and revision is directed to the prevention of hasty action, and to the encouragement of flexibility in providing physical facilities in changing situations.

The compilation and coordinated listing of the proposed public improvements is of great value to a community, and should be performed by all communities in some form or another.

Even if the capital improvement program were to be nothing more than a listing of proposals of operating departments, the benefits of this (as contrasted to haphazard and sporadic requests) is immeasurable. The very fact that the operating departments are requested to systematize their proposals, and are asked for specific information about a project, will help to channel a generalized concept into a specific scheme. If nothing else, a compilation indicates and prevents duplications, or proposals which would negate each other; it indicates the areas in which the most work and greatest expenditures are suggested, and, it presents at one time, instead of in piecemeal fashion, the roughly anticipated major capital expenditures for the community.

#### The Role of the Planning Commission

Wherever possible, PLANNING ADVISORY SERVICE urges the planning agency to perform the function of capital improvement programming. Sometimes this responsibility is required by enabling ordinance or charter.

In localities where the programming of improvements is optional, and not required by law, the planning commission may be guided by these considerations:

- (1) Effective compilation of proposed improvements necessitates active relationships and cooperation with operating departments.
- (2) The planning commission may discourage proposals for expenditures which would not be in keeping with the over-all development plan of the community.
- (3) The capital improvement program is tangible evidence of the work of the planning commission which is forcibly presented to the executive and legislative bodies of the community, and to the public at large.
- (4) The translation of over-all goals for a community into the physical facilities proposed for that community is essential for effective planning.

The planning agency can utilize the capital improvement program as a major means of effectuating the long-range development plan for the community. At the same time, the over-all plan for the community should be the guide for the acceptance or rejection of proposed capital improvements.

Thus, although the compilation of projects proposed by operating departments is of extreme value to the community, the planning agency can perform an even greater function. The planning agency can either itself have the responsibility for arranging capital improvements in order of priority, or can point out the implications so clearly that the legislative body may make the appropriate priority decisions. In either case, the legislative body in the final analysis has the responsibility of decision making.

A planning commission director has written to PLANNING ADVISORY SERVICE that he thinks the planning agency is not making a contribution when it prepares a capital improvement program along the lines generally established in our communities. For the purpose of discussing this attitude, we have over-emphasized his following points:

The capital improvement program is generally only a compilation of projects proposed by operating departments; it is, in a way, a high type of clerical task, rather than a planning task. Projects originating from operating departments should be checked to see that they are not in contradiction to over-all development plans for the community, but since many of them are more maintenance and operating improvements than proposals to markedly alter the form of the community, these projects are not likely to be in contradiction to future development plans.

Associated with this (that the operating departments know best what is needed for the successful operation of their own bailiwicks) is the belief that by the time the project has been so formulated as to have exact cost estimates, engineering detailing must have been undertaken. It is not the job of the planning commission to pass upon the engineering correctness of a proposal, nor to check each financial estimate. Also, by the time a proposal has been carried to engineering detail stages, the particular proposal is generally solidified - it can either be accepted or rejected, but cannot easily be modified.

In summary, such criticism implies:

- (1) Most public improvement programming is only a compilation of proposals for the better maintenance and operation of the existing community.
- (2) The planning agency enters into the process too late to evaluate the project.
  - (a) Once engineering detailing has been undertaken, the project is solidified, and the alternatives to the project have been already eliminated;

- (b) the planning agency is not generally competent to, and should not be expected to pass on, engineering details;
  - (c) the planning agency cannot ordinarily judge the reasonableness of the anticipated costs.
- (3) The way in which community resources are to be spent is a legislative responsibility; the planning commission has no scientific measurement of priorities for various improvements.
  - (4) The planning agency can spend its efforts in more useful work - the preparation of the over-all development plan of the community.

Instead, our member suggests that the planning agency work closely with operating departments prior to the time when detailed costs and engineering are needed so it can point out alternative solutions, and can indicate whether the proposal fits in with the over-all development plan for the community. The planning agency can also serve as an initiator of projects - either by tactfully suggesting to operating departments that certain projects be incorporated as a part of the operating department's proposals, or else by making a direct proposal to the legislative body. It was suggested that the planning agency's role be two-fold - that of continuous consultant to the operating departments, and that of originator of projects (growing from the implementation of the over-all development plan), but that the actual compilation and scheduling of the projects be made by a fiscal or budget office, according to the community's financial ability to pay, with the final decision on the priorities and acceptability of projects being a legislative one.

PLANNING ADVISORY SERVICE believes that these, and similar considerations, will help the planning agency to evaluate and recognize its part in the preparation of capital improvement programs, and may help to determine the form of such future programs. PLANNING ADVISORY SERVICE urges the planning agency to be guided by both the advantages of assuming the responsibility of capital improvement programming, and by the criticisms of many present practices.

If the planning agency determines that it will serve in the coordinating role of program preparation, it will want to do its job as expeditiously and accurately as possible, and to present the results in as effective a manner as possible. The remainder of the Information Report is directed to this purpose.

#### General Procedure

The following steps, assuming legislative authorization, are generally followed in communities undertaking capital improvement programs. It is also assumed that the planning agency has accepted responsibility for the preparation of the program.

1. Public statement by executive officer - governor, mayor, city manager - that all operating departments are to submit proposed public improve-

ment projects to the planning agency. Usually, the date when these projects will be considered by the executive and legislative bodies is specified. A general policy statement may also be made, such as a request for economy, a request for programs that could be adjusted to a period of crisis, etc. The executive officer might also invite proposals from citizen organizations.

2. The finance office or officer undertakes an analysis of the financial status, and existing and potential resources of the community. At a later date, the planning agency may work with the finance agency in assessing the amount of funds which will probably be available to the community and which should be devoted to expenditures for public improvements.
3. The planning agency takes the initiative in making contacts with the operating departments and requests that proposals for improvements be set forth according to certain standard procedures. The planning agency supplies the forms on which the proposals should be reported, and should also furnish a written set of instructions on the methods to be followed in filling in the forms.
4. The planning agency may work with the operating departments in advising on the desirability of projects before they are formally submitted. The extent of such cooperative endeavors will be dependent upon the type of relationship established between the planning agency and the operating departments, and the time and staff resources of the planning agency.
5. After the operating departments formally submit their proposals, the planning agency should review these proposals and all assembled data in light of the over-all development plan for the community and the financial prospects for the community. (It is assumed that the planning agency will have obtained data from the finance agency.) Also, the proposals from citizen organizations, if any, should be reviewed.
6. The planning agency should take the initiative in discussing the proposals with the operating departments and the interested citizen organizations to clarify and re-define proposals, if necessary. If the planning agency recommends omitting or postponing a project, its reasons should be stated.
7. The program, together with the pertinent data and planning agency recommendations, should be presented to the executive officer. After his review of the material, it should be formalized in published form.

8. The program should be submitted to the legislative body, together with the executive officer's budget message or report. The program for the immediately following year might be incorporated into the annual budget message.
9. There should be public hearings and an opportunity for public review. Copies of the planning agency report should be available to all interested citizens and civic groups, in addition to being distributed to legislators and operating departments.
10. After legislative action in adopting or rejecting proposals for capital improvements, funds must still be made available. Even though a program for capital improvements may be adopted, there is another opportunity for reviewing the proposals at the time of appropriation of funds or voting for bond issues. Even after appropriations have been made, changes may still be made prior to construction.

#### What is a Capital or Public Improvement?

The more usual definition of a public or capital improvement includes new or expanded physical facilities for the community which are of relatively large size, are relatively expensive, and are relatively permanent. Such items as streets, playgrounds, harbor facilities, police stations, schools, libraries, sewer systems, are considered capital or public improvements. Large-scale replacement or rehabilitation of existing facilities also fall within the definition. Whether equipment is also considered to be a public improvement depends on the type of operating budget under which the community functions. For example, a major piece of equipment such as a fire engine is in the "twilight zone" - some communities would classify it as a public improvement, others would not. It has a direct relationship to the fire station in which it is housed, and to the function of the fire station; it also is relatively expensive and of relatively long life. It is, of course, not as fixed nor as expensive, nor as long in life expectancy as the fire station; however, it could be contrasted to office equipment utilized within the fire station. Office equipment would generally be considered an operating expense and would probably only be included as part of a public improvement if an office were to be furnished all at one time, in conjunction with a new or expanded facility.

The terms "capital improvements" and "public improvements" are used interchangeably in the literature, and will also be so used in this report. However, distinctions have been made, particularly for accounting purposes, which refer to capital improvements as any expenditure for the purpose of increasing the physical assets of a community, which term would obviously include equipment, while "public improvement" would be reserved for the building or structure type physical facility. Thus, public improvements would be included in the term "capital improvements," while the reverse would not be true. Such preciseness is not followed in this report, but is a distinction which should be made in the programming process.

The planning agency\* charged with the preparation of the capital improvement program will want to consult with the financial agency of the community to establish agreed upon definitions of what constitutes a capital improvement. In addition to the distinction between structures and equipment, it is suggested that consideration be given to establishing certain standards of measurement, perhaps even arbitrary measurements, so that there will be consistency in differentiating between capital improvements and operating expenses. For example, one type of standard would be that all physical items involving expenditures of over \$1,000, or of having an anticipated life of 10 years and over, would be considered as capital improvements. Also, agreements should be reached, for example, on whether street re-paving (which is largely a maintenance expense) should be included - or whether the widening of existing streets or just the opening of new streets should be included. Carrying this example further, if street re-paving is to be included, would it be most desirable to group a number of such proposals together to form a project meeting the standards of relative size of expenditure, etc.?

While costs for personnel to operate the facilities are not a part of capital improvement expenditures, the personnel costs of engineering and architectural detailing of the projects - the preparation of the projects - is a legitimate charge to the project, and no more divorced from the finished product than the land acquisition, construction labor, or material costs. Thus, detailed planning for a project is considered in the total costs of that project.

#### Time Period

Another element of capital improvement programming is the scheduling of proposed projects over a period of time. Generally, in this country, capital improvement programs are set up for a six-year time period with annual review. Although the selection of this time period is frequent, it is not based on a scientific determination that this is the optimum period of years for forecasting the capital requirements of a community. It is a convenient period of time, manageable for purposes of analysis and arrived at by elimination of alternatives.

The program obviously could not be established for a period of one year, for it would defeat its purpose of being "long-range"; the same reasoning holds for periods of two or three years - there would not be sufficient length of time to spread out the desired number of projects to be undertaken. If four years were chosen, the capital improvement program might coincide with the election year; a greater degree of continuity than would be implicit in simultaneous ending of both the legislative term and the capital improvement program was considered desirable. The five-year period had the disadvantage of identifying capital improvement budgeting with the national five-year plan adopted by countries such as Russia. Six years was the next unit of time above five; it was thought that any period longer than six years would begin to be unrealistic and inflexible.

However, there is no reason to rigidly adhere to the six-year period. Some communities might prefer to emphasize the political aspects of public improvements, and thus might prefer that the capital improvement program initially spe-

cifically coincide with the election period. Others, since capital improvement programs are reviewed each year, might prefer a longer period of time for forecasting major community physical expenditures. Ten-year periods of programming have been utilized in some communities. However, historically, much of the local capital improvement programming stems from the recommendations of the National Resources Planning Board (in its various forms) promulgated during the depression years of the 1930's and the pre-war 1940's. The NRPB favored a five or six-year program.

### The Problem of Priorities

The most difficult problem in programming public improvements is that of establishing standards of priorities for these improvements. How does one determine within a limited budget which is more important - the new bridge or the new sewage-treatment plant; the new school or the new swimming pool? Theoretically, these proposed improvements should be evaluated in accordance with the master plan for the community. However, most communities are in the process of preparing a master plan, and do not now have a completed plan against which improvement proposals may be measured. Thus, there must be standards for evaluation other than that of agreement with the master plan.

Various criteria for establishing priorities for capital improvements have been proposed. These usually have been in generalized fashion. For example, the National Resources Planning Board (in its preliminary edition of Long Range Programming of Municipal Public Works, July 15, 1940) suggested the following:

- "1. Protection of life.
2. Maintenance of public health.
3. Protection of property.
4. Conservation of resources.
5. Maintenance of physical property.
6. Provision of public services.
7. Replacement of obsolete facilities.
8. Reduction of operating costs.
9. Public convenience and comfort.
10. Recreational value.
11. Economic value.



12. Social, cultural and aesthetic value.
13. Promotional value through effect on future developments.
14. Relative value with respect to other services."

Earlier (1935), the Michigan State Planning Commission listed the following factors as being considered in determining the priority of projects:

- "1. Employment situation.
2. Extent of development of local natural resources.
3. Portion of project beneficial in direct employment.
4. The financial stability of the local government unit.
5. The financial set-up of the project (as to self-liquidating features).
6. The suitability of the project as to its local environments.
7. Other considerations of geographic and economic factors.
8. The local preparedness for the project, such as ownership of sites, development of plans, etc.
9. Public safety.
10. Social desirability.
11. Injurious economic competition.
12. Length of time involved in project, and ability to taper off at the end.
13. Divisibility of project into jobs manageable by small building interests."

As it can be readily observed, these criteria are "intangible" community goals, and are not subject to precise measurement. However, by setting forth even these very generalized criteria, the planning agency or the community may better assess the relative success of each proposed project in attaining these goals.

Lacking at present scientific means of weighting the various "intangibles" and lacking scientific means of measuring the attainment of these generalized goals, perhaps the main role of the planning agency is that of pointing out the implications of alternative solutions to the executive and legislative bodies. The executive and legislative bodies are bound in the last analysis by the "standard" that they must make choices which are acceptable to the voters of the community.

In pointing out the implications of various proposed projects, the planning agency might approach this problem on the grounds of what the community needs most. If the community needs to protect its economic base, if it needs to make itself more attractive to industry, what improvements would be of most value to industry? For example, if the highway department claims that it needs a new thoroughfare, and the water department says a primary requirement is a new pumping station - the planning agency might point out that the priorities of these will be dependent upon the needs and requirements of industry. The planning agency should indicate whether additional highway transportation facilities, or an adequate supply of water is most important to existing, expanding, or potentially new industries. On each alternative suggested improvement, the planning agency can question the relative effects of the improvement. As another example, in choosing between a new police station or a new swimming pool, the planning agency can raise the following types of questions: What types of crime and delinquency are prevalent in the community? Is a large source originating from the teen-age and other juvenile groups? If so, would positive means of providing alternatives to crime, i.e., recreation, be more desirable than protective measures, such as the police station? If positive incentives to recreation are desired, is the swimming pool the best form of insuring such recreation, or should there be provided club house type facilities? These are simplified, and perhaps over-simplified, examples of ways in which the planning agency might be of assistance to legislative and executive bodies in decision making. The question arises on how much of a master plan is required even to formulate these alternative types of proposals, and to analyze the implications of these proposals. How much basic data is needed?

There is no easy answer to these questions. Certainly, the knowledge of present population characteristics (including economic status, age distribution, skills, etc.) and the distribution of this population is necessary. Also, there should be a determination of the characteristics and distribution of future population. The area that is to be served, together with the density pattern, will help in judging capacity, design, and number of facilities that will be required. Also, an investigation of the economic potentialities of the area is a prerequisite. However, it may not be necessary to have a completed highway plan, recreation plan, etc., before assistance beyond compilation of proposed capital improvement programs may be given by the planning agency..

### Liaison With Departments

The planning agency will want to establish certain procedures for requesting information from operating departments and for the cooperative working out of the capital improvement program. As soon as the planning agency has been given the responsibility for preparing the program, it should devise a form, or set of forms, to be used by the operating departments in reporting proposed projects (see section on "Checklist of Information Needed by Planning Agency in Respect to Proposed Projects" and "Sample Forms" in the Appendix). It should also prepare a written statement on the meaning of the program, and include instructions on the manner in which the forms are to be filled in, and such information as date of submittal, number of copies to be returned, name of person filling in the form, and

any other pertinent guides to complete and accurate reporting of proposed projects. The instructions should be detailed and should apply to each question asked on the form. For example, when asking for information on estimated construction costs (this may be broken down into additional categories), the instructions should either specify that the estimate should be one furnished by independent bids or estimates (and the number and type of independent analysis should be specified) in addition to department estimates, or the form should include questions to identify who made the estimates.

The planning agency should invite the operating departments to discuss proposals at any time with a designated member of the planning agency staff, and should indicate that a member of the planning agency staff will review with the designated operating department staff member the proposals after they have been formally submitted. The planning agency should frequently stress its willingness to make available pertinent data, and to advise on the applicability of suggested projects with the programs of other departments and with the master plan. The planning agency should strive to be in a position whereby it is consulted when projects are in a generalized form, prior to the time when detailed specifications of the project have been made (see section on "The Role of the Planning Agency"). It should also have the type of relationship with the operating departments which would enable it to originate suggestions for improvements, consistent with the emerging over-all plan of development for the community, which might be incorporated into operating department proposals.

Preferably, the planning agency will establish relationships with the governmental agencies that are outside of the municipal family of departments. For example, there may be a separate school district, with separate bonding power - similarly, there may be separate park districts, sewage disposal districts, etc. It would be most helpful in presenting a picture of future public expenditures if all regular governmental agencies within the community would systematically be included in the capital improvement program.

#### Check List of Information Needed by Planning Agency in Respect to Proposed Projects

The planning agency needs certain information on each proposed project before it can analyze the type and importance of the project. It generally requests this information from operating departments on standard forms. (A few of these forms are reproduced in the Appendix). The amount of information requested should be related both to the habits of the community officials and also to the use of the data once gathered by the planning agency. The planning agency should not seek information that it does not intend to use, or that, because of limited staff time, it cannot tabulate and analyze. The following checklist is suggested for use by the planning agency in formulating its standard form on which project information is to be recorded. This checklist will also be of value to the operating departments in the process of internal sifting and selection of proposed projects,

1. Name of project.  
(Sometimes this may be answered most simply by a code designation, for example, street paving No. 1 - or SP-1.)
2. Nature of improvement.  
(Following through with the above example, the planning agency should know whether a street is being newly paved, is being patched, is being completely re-surfaced, is being widened, etc., whether the project is to be new construction, expansion or re-construction of facilities should be indicated.)
3. Location of project.  
(An exact, rather than a general description, is needed. For example, not the widening of Washington Avenue, but the widening of Washington Avenue between Fourth and Tenth Streets.)
4. Specifications of project.  
(This should include pertinent material on the size, building type, kinds of facilities included, capacity, type of construction, etc.)
5. Reason why this project is being submitted.  
(This should include a justification of the need for the project, and also the need at this particular time.)
6. Priority of project.  
(Operating department should indicate the relative importance of projects by assigning numbers in sequence, the top priority project receiving the lowest number. In cases of equal priority, arbitrary numbers should be assigned, with notation made. Other indications of priority may be sought. For example, San Francisco has just published its latest annual capital improvement program, in which operating departments were asked whether they considered the proposed projects to be important in case of peacetime economy, limited war economy, or major wartime economy.)
7. Is this project being submitted for the first time? Resubmitted without change? Resubmitted with modification? Is this project a continuation of one already approved and under way?
8. Status of plans.  
(A detailed checklist on this question is as follows:
  - (a) Preliminary estimates only.
  - (b) Survey begun.

- (c) Surveys completed,
- (d) Work on plans not begun.
- (e) Sketch plans in preparation.
- (f) Sketch plans completed.
- (g) Detail plans in preparation.
- (h) Detail plans completed.
- (i) Detail plans and specifications completed.

However, the planning agency may seek a more generalized response, such as (1) preliminary plans, (2) detail plans in preparation, (3) detail plans and specifications completed.)

9. Has land been acquired?
10. Is it expected that facilities must be expanded at a later date? If so, what facilities and why? Will there be room for expansion of facilities on the site?
11. Estimated cost of land.  
(Or, if land has been acquired, total cost of land.)
12. Estimated cost of engineering drawings. Has this amount been spent?
13. Estimated cost of supervision.
14. Estimated cost of materials.
15. Estimated cost of construction labor.
16. Estimated cost of total project.
17. When could construction be begun?  
(If already begun, signify date when started.)
18. What is the anticipated completion date?
19. Estimated cost of project by year:
 

1st year.....	4th year.....
2nd year.....	5th year.....
3rd year.....	6th year.....

20. Estimated life of the project.
21. Estimated annual cost of operation and maintenance.  
(Give breakdown of costs if they will differ sharply between early maintenance and operation - say, during the first five years - and later years.)
22. Will there be future expenditures for major equipment not included in project cost? If so, explain.
23. Will project be revenue producing? If so, state estimated amount of revenue likely to be produced annually.
24. Can the operation and maintenance of this project be absorbed in the work load of existing department personnel? If not, what expansion of personnel will be necessary? (For example, a new swimming pool might be constructed which could be kept in repair by existing maintenance crew, but which requires two additional trained lifeguards, and one washroom attendant, another one being transferred from an existing facility.) What will be the annual estimated cost of the new staff?
25. Will other facilities be abandoned or discontinued if this construction is carried out? (For example, a centralized municipal garage might be built in the expectation that individual repair facilities of existing department garages would be discontinued.)
26. Will this project affect other city departments? (For example, the location suggested for the library may now be owned by the park department.) If so, have these departments been consulted?
27. Do they approve of the proposed project?
28. Have any funds been appropriated or earmarked for this project? If so, how much, and from what source?
29. Suggested means of financing project.
30. Name and title of person supplying information.

Checklist of Ways in Which Projects May be  
Analyzed and Presented in Summary Report

One of the major tasks of the planning agency, after gathering the data and making decisions as to the relative importance of the projects, is to make the information available to the legislative and executive bodies of the community, and to interested citizens. All the information that was gathered for analysis purposes from the operating agencies need not be presented in detail in the final report, but since

written descriptive sections on the proposed program may be prepared, this information may be incorporated in the text for the items given major priority. The report will generally be composed of these parts - (1) the over-all summary of proposed projects, compared to the sources of financing for these projects, (2) the description of the methodology followed in preparing the program, (3) the descriptive analysis of types of facilities proposed, together with photographs or sketches, and (4) the detailed tables listing each project and the decisions made on these projects.

Wherever possible, the reasons for including proposed projects should be indicated, and the reasons why they are assigned the priority they receive. This should be done regardless of whether the planning agency assigned the priorities, or is summarizing them as formulated by the operating departments.

Following are some roughly indicated suggested means of presenting data. These may be combined in various fashions, and may be extended over periods of time. For example, it may be desired to tabulate projects by department by order of priority for the immediately following year, or it may be desired to tabulate this information for the immediately following year, plus the subsequent years covered by the program.

1. Proposed projects should be mapped. This may be done on a series of maps, one showing proposed street improvements, the next showing park and playground improvements, etc., or, it may be done on a composite map, showing all improvements. As an aid to preliminary analysis, this has considerable value in the study of the concentration or dispersal of projects, in pointing up duplications or gaps in proposals, and in revealing glaring inconsistencies or negation of purposes of the improvements. As a final tool for presentation, the mapping of recommended improvements is of public relations value, since citizens, legislators, etc., may be shown what types of projects are proposed for particular sections of the city.
2. Project types should be differentiated by symbols or colors. Consideration might be given to the indication of anticipated service areas for each project; those projects serving the entire community should be differentiated from the purely local projects by a dominant color.
3. Tabular presentation of recommended projects by department totals, and by year of scheduling.

Projects	Total Expense	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.
Fire Dept.	\$500,000	100,000	200,000	100,000	50,000	50,000	
Health Dept.	325,000	325,000					
Park Dept.	110,000	10,000	25,000	50,000	10,000	10,000	5,000

etc.

4. Tabular presentation of recommended projects by each department, and by year of scheduling.

Projects by Department	Total Expense	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.
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Fire Dept.

1. New drill  
tower at Long-  
horn Place and  
Delaware

2. Rehabilita-  
tion of fire station  
at 7th St. and  
Locust Avenue

3. Construction  
of new firehouse  
at Langley and  
Bees Streets

etc.

5. Tabulation presentation of projects by status - recommended, under contract, completed.

6. Tabular presentation of completed and under contract projects.

Description of Project	Total Cost	Completed	Under Contract	Remarks
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7. Comparison between number of projects recommended last year and estimated costs to the number of projects actually constructed and actual costs.

8. Graphic presentation of number of projects submitted this year and action thereon; number under contract; number recommended for first priority; number recommended for later years within the program period; number recommended but not scheduled; number deferred for period beyond the capital improvement program; number abandoned.

9. Tabular listing of projects not included in present program, and reasons why.

10. Comparison of presently proposed projects with previous years, according to type.



11. Listing of all top priority projects, according to priority, down to those of least priority.
12. Graph of total income and total expenditures of city over past years with anticipated income and expenditures.
13. Presentation of projects by source of funds. This could be done by distinguishing among assured funds, expected funds, and uncertain funds, or in more detail by distinguishing, for example, among special assessments, signed agreements with Federal Government, assured agreements with State Government; bond issues approved by electorate, prior budget appropriation, budget requested, etc.
14. Comparison of requests for capital improvements to funds (requested or appropriated) for operating departments, by department.
15. Comparison of total costs of capital improvements to operating and maintenance charges and to anticipated revenues, if any.

#### Legal Authority of Capital Improvement Programming

The planning agency, although it may be empowered to prepare the capital improvement program, and although it may have the authority to determine what may be included in that program, and what may be excluded, does not have the final decision on capital improvements for the community. In New York City, the City Planning Commission has the legal right to recommend projects, and the Board of Estimate selects the projects from among those recommended by the planning commission; if a project is not recommended by the planning commission, it may be included by the Board of Estimate only by a three-fourths vote. Thus, it would appear that not only would operating departments be required to abide by planning commission decisions, but that the Board of Estimate would have to muster a great deal of strength to over-ride the planning commission. However, the mayor, by indicating the maximum amount of debt which, in his opinion, the city may soundly incur for capital projects, can control the extent and scope of the capital improvement program; the Board of Estimate, by controlling the appropriations to the City Planning Commission, also has an effective weapon to use against the planning commission, should it wish to do so.

Following are excerpts from Chapter 9 of the New York City Charter (effective January 1, 1938) pertaining to the capital budget:

##### "Definitions

211. As used in this chapter: 1. The term 'capital project' shall mean:
- (a) Any physical public betterment or improvement or any preliminary studies and surveys relative thereto.
  - (b) The acquisition of property of a permanent nature.
  - (c) The purchase of equipment for any public betterment or improvement when first erected or acquired.

"It shall not include any public betterment or improvement, the acquisition of any real property or the purchase of any equipment, any part of the total cost and expenses of which shall be paid out of the proceeds of assessments, nor the repavement of any street, avenue, highway or public place.

2. The term 'pending' shall mean authorized but not yet completed.

#### Report of comptroller

212. Not later than the fifteenth day of August in each year, the comptroller shall submit to the board of estimate, to the council, to the city planning commission and to the director of the budget, a report which shall be published forthwith in the City Record, setting forth the amount and nature of all obligations authorized on account of each pending capital project, the liabilities incurred for each project outstanding on the first day of July and setting forth and commenting in detail upon the city's financial condition and advising as to the maximum amount and nature of debt which in his opinion the city may soundly incur for capital projects during each of the six succeeding calendar years, and containing such other information as may be required by the city planning commission or by law.

#### Departmental estimates for capital projects

213. On such date as the mayor may direct, but not later than the fifteenth day of August, the head of each agency shall submit to the city planning commission and the director of the budget a detailed estimate of all capital projects pending or which he believes should be undertaken within the six succeeding calendar year. Such estimates shall be known as departmental estimates for capital projects and shall be in such form and contain such information as may be required by the city planning commission, by the director of the budget or by law. Such departmental estimates shall be public records and shall at all reasonable times be open to public inspection...

#### Certificate of the mayor

215. Not later than the fifteenth day of September, the mayor shall submit to the city planning commission the report of the director of the budget, together with the mayor's certificate as to the maximum amount of debt which in his opinion the city may soundly incur for capital projects during the ensuing calendar year with his recommendations as to the capital projects to be included in the capital budget...

#### Proposed capital budget and program; submission

217. Not later than the first day of November, the city planning commission shall submit to the board of estimate, to the council, to the director of the budget and to the comptroller a proposed capital budget for all authorizations recommended to be adopted for the ensuing calendar year the aggregate amount of which shall not exceed the amount specified in the mayor's certificate, and a capital program for the five calendar years next succeeding such ensuing calendar year, both of which shall be published forthwith in the City Record.

"Proposed capital budget and program; contents

218. The proposed capital budget and program shall be arranged in such manner as to set forth clearly:

1. As to each pending capital project: a brief description, the original estimated cost, the date of authorization, the amount and nature of obligations authorized, the amount and maturities of such obligations issued, the amount of all liabilities outstanding and the unencumbered balances of authorizations on the first day of July, the amount of liabilities estimated to be incurred during the balance of the calendar year and the estimated additional appropriation required for completion.
2. As to each new capital project recommended: a brief description, the calendar year in which it is recommended to be undertaken and the total estimated cost.
3. As to each project: the estimated date of completion, the amount of liabilities estimated to be incurred in each of the six succeeding calendar years, the estimated useful existence, the amounts, the nature and terms of obligations recommended to be authorized in each of the six succeeding calendar years and the estimated annual maintenance and service charges.
4. Any recommendation that a pending project be modified or abandoned or further authorization therefor postponed.
5. A brief description of each new project recommended in the several departmental estimates, but not recommended by the city planning commission to be undertaken within the six succeeding calendar years, with the reason why such project is not recommended.
6. Such other information as the city planning commission may deem pertinent or as may be required by law.

When a project is divisible the information required shall be set forth for each part thereof...

Capital budget; adoption by board of estimate

221. Between the twenty-fifth day of November and the fourth day of December, both inclusive, the board of estimate shall adopt a capital budget for the ensuing calendar year. Should the board of estimate fail within such period of time to adopt such capital budget, it shall be deemed to have been adopted in the form submitted by the city planning commission.

The capital budget shall specify the capital projects which may be undertaken during the ensuing calendar year and shall fix the maximum amount of new obligations of the city which may be authorized during such year to be incurred on account of each such project and each pending project and the nature, terms and maximum amount of the obligations which the comptroller may be authorized to issue for the liquidation of such liabilities.

"The board of estimate may include in the capital budget any capital project which was included by the city planning commission in the capital program. It may, not less than fifteen days prior to the adoption of the capital budget, request the city planning commission to furnish, with respect to a project not included in the capital program, information similar to that included in said program with its recommendations. Such information shall be submitted within ten days and shall be published forthwith in the City Record. If the city planning commission recommends such project the board of estimate may include it in the capital budget. If the city planning commission does not recommend the project the board of estimate may include it only by a three-fourths vote. The board of estimate shall not adopt except by a three-fourths vote any capital budget pursuant to which obligations exceeding in the aggregate the amount stated in the mayor's certificate may be issued."

### What to do in Periods of Crisis

San Francisco has just completed its capital improvement program for 1951-52 through 1956-57. Departments were requested to specify what projects were necessary and desirable in the event of peace time, what projects were important in case of limited war and what would be needed in times of major war. The departments were able to scale down the \$31,696,668 desired for 168 projects in a peace-time economy to \$12,854,151 for 42 projects if a major war were to occur. These decisions were made by the operating departments. For example, the civic auditorium, which would require over one and a half million dollars, was proposed only as a peace-time project; it was not deemed essential in the event of limited or major war. Public utilities expenditures were listed as being almost as important in a limited war as in peace time, but were reduced to approximately one-half (\$6,639,751) in case of a major war.

The proposed capital budget for 1951 in New York City was reduced from \$906,821,117.95, proposed by 28 city departments and agencies, to \$485,510,728.34; after conferences with the City Planning Commission, the departments had voluntarily deferred \$150,090,000 of their initial requests, and the Commission, at subsequent executive sessions, cut the remaining \$271,311,389.61. The current defense effort and the financial condition of the city were cited as the most important factors in reducing the proposed budget allotments. In an October 1950 news release of the City Planning Commission, it was stated that, in the preparation of the capital budget, "We concentrated on such absolutely essential items as schools, hospitals, transit, sewage-treatment plants, bridges, traffic improvements, and any other items deemed absolutely necessary for the well-being of our citizens in war time. In view of present world conditions, we were extremely careful in making our tentative decisions on the proposed budget."

These are two examples of how world conditions affect the capital improvement program - in one case, the operating departments were asked to consider three different possible economic situations, and to prepare their proposals for future expenditures according to what would be required under each. In the latter case,

the planning agency used the defense effort as a criterion in judging whether a proposed project should be recommended for the capital budget or not.

Another aspect of capital improvement programming in periods of crisis is that the general planning for deferred public works should be stressed. Many communities found that projects which were proposed (and accepted for construction) prior to the last World War had to be deferred during the emergency period preceding the war, and during the war itself. In many instances where detailed engineering and specifications were prepared during the deferment period, it was found that these were obsolete by the time the war ended. Although the intent of such detailed work was to enable the project to be ready for construction as soon as materials and labor were again available, not only did technological changes make the work obsolete, but population and economic changes also necessitated scrapping the detailed work.

It has been advocated that communities should spend money for capital improvements when material and labor prices are low, and should withhold expenditures when prices are high. They should spend when employment is low and withhold when employment is high. Thus, communities would "pump-prime" their economies in similar fashion to national policies in periods of depressions, and would abstain in periods of wars and scarcities. This is difficult. Some projects are all the more needed in a time of crisis such as a war, when operations must be as efficient as possible. In the reverse situation, in periods of depression, it may be difficult to collect taxes and other revenue, and the community may not be in a financial position to undertake vast public improvements - particularly when there may be political pressure to abstain from making expenditures. These are situations in which the federal and state governments have in the past given assistance to local communities.

# CAPITAL BUDGET AND 6 YEAR CAPITAL PROGRAM

Date \_\_\_\_\_

**CITY PLAN COMMISSION**

**PROJECT FORM C**

- |  |                                     |
|--|-------------------------------------|
| 1. Department: _____   | Submitted By _____                  |
| Division: _____  | Title _____                         |
| 2. Project Title: _____  | Date _____                          |
| 3. Approved Project Priority: _____                                |                                     |
| 4. Code No.: _____   |                                     |
| 5. Location: _____   |                                     |
| 6. Description: _____  |                                     |
| 7. Will Project Be Revenue Producing _____ How Much Annually _____ |                                     |
| 8. Site Is Secured _____ To Be secured _____                       |                                     |
| 9. Status of Plans:  |                                     |
| Preliminary Estimate Completed _____                               | Preliminary Plans Completed _____   |
| Survey Begun _____   | Detailed Plans in Preparation _____ |
| Survey Completed _____   | Detailed Plans Completed _____      |
| Preliminary Plans in Preparation _____                             | Specifications Completed _____      |

10. Breakdown of Costs:

Item	Amount		Notes (Leave Blank)
I. Planning (total a, b, c) _____	_____	_____	
(a) Architect's Services _____	_____	_____	
(b) Engineering _____	_____	_____	
(c) Inspection _____	_____	_____	
II. Land _____	_____	_____	
III. Construction (total a, b) _____	_____	_____	
(a) Labor _____	_____	_____	
(b) Non-Labor _____	_____	_____	
IV. Miscellaneous Equipment (total a, b) _____	_____	_____	
(a) Equipment _____	_____	_____	
(b) Furniture _____	_____	_____	
V. Other _____	_____	_____	
Total Estimated Cost (Same as Col. 8, Form A or Col. 14, Form B)	_____	_____	
	Amount		Explanation
11. Additional Annual Operation and Maintenance _____	_____	_____	
charges (total a, b, c) * _____	_____	_____	
(a) Operating _____	_____	_____	
(b) Maintenance _____	_____	_____	
(c) Other _____	_____	_____	

(\*Indicates Savings by Minus Sign.)

12. Purpose of Projects:

13. Relation to Other Projects:

14. Relation to Any Long Range General Program:

15. Anticipated Source of Financing:

• Current Revenue	_____	_____
General Obligation Bonds	_____	_____
Revenue Bonds	_____	_____
Federal Grant-in-Aid	_____	_____
State Grant-in-Aid	_____	_____
Special Assessment	_____	_____
Special Fund	_____	_____
Other	_____	_____
Total	_____	_____

16. General Remarks:

(For use of the Commission only. Leave blank.)

Source: "A Manual for Preparing and Submitting Information Relative to a Capital Improvement Program for the Fiscal Years 1950-1956," City Plan Commission, Providence, Rhode Island, February 1950.

Department of City Planning  
INDIVIDUAL PROJECT DATA

(Make no entry here)

Department \_\_\_\_\_ Date \_\_\_\_\_  
Division or Bureau \_\_\_\_\_  
B. Priority (Department's number) \_\_\_\_\_

(See instructions for filling out forms. Type single space if necessary)

1. Name of Project \_\_\_\_\_

2. Location \_\_\_\_\_

3. Description: New ☐ Replacement ☐ Addition ☐ Other ☐  
\_\_\_\_\_  
\_\_\_\_\_

4. Status of Project:  
Resubmission, unchanged ☐ Resubmission, modified ☐ No longer proposed ☐ Not submitted last year ☐

5. Purpose of proposed facilities: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Estimated addition to (+) or saving in (-) annual expenditure for operation and maintenance:  
\$ \_\_\_\_\_ (personal service) \$ \_\_\_\_\_ (other expenditure) \$ \_\_\_\_\_ (Total) ; \_\_\_\_\_ (No. of persons)

7. Anticipated annual income from project (if any): \$ \_\_\_\_\_ Source: \_\_\_\_\_

3. Estimated Cost and Status:

	Total Cost	Expenditures and encumbrances all prior years and through:		Required after June 30, 1950 to complete (Col. I minus III)
	I	June 30, 1949 II	June 30, 1950 III	IV
Studies and plans	\$ _____	\$ _____	\$ _____	\$ _____
Land acquisition	_____	_____	_____	_____
Construction	_____	_____	_____	_____
Other ( _____ )	_____	_____	_____	_____
<b>TOTALS</b>	\$ _____	\$ _____	\$ _____	\$ _____



Fiscal Year	From Annual Budgets			From Bond Funds (Specify in Item 10)		From Other Sources (Specify in Item 10)			Total From All Sources	
	Approved I	Additional II	Voter Approved III	New IV	Approved V	To be Obtained VI	Approved VII	To be Obtained VIII		
Cumulative thru June 30, 1949	\$	\$	\$	\$	\$	\$	\$	\$		
Current year 1949-50	\$	\$	\$	\$	\$	\$	\$	\$		
1950-51	\$	\$	\$	\$	\$	\$	\$	\$		
1951-52										
1952-53										
1953-54										
1954-55										
1955-56										
After:										
1955-56										
Total 1950-51 thru and after										
1955-56	\$	\$	\$	\$	\$	\$	\$	\$		

10. Proposed Financing: (For bond funds give year(s) bonds were approved or approval will be sought by electorate, for other sources specify source of financing.)

11. Necessary Prior Action:

12. Remarks:

Prepared by \_\_\_\_\_ Approved by \_\_\_\_\_  
(Department Head)

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