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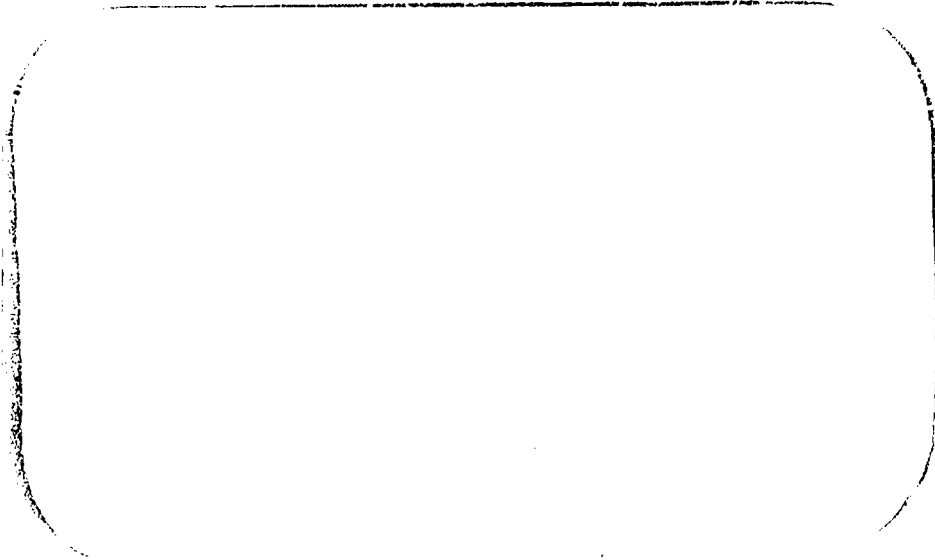
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ABSTRACT

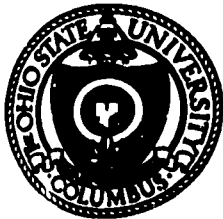
The project presented here provides a role-playing game simulation that points out the complexities of locational decision and indicates ways in which those decisions might be influenced by various public and private citizens groups. It focuses on the bargaining, citizen reaction, and possible side payments. Designed as a heuristic device, the game focuses upon a number of issues: 1) inequities in the location of noxious public facilities; 2) the effect of citizen organization on governmental decision-making processes; 3) potential influence of money power on politics; 4) civil disobedience as an instrument of power; 5) the pressure of time on decision making; and, 6) the overall nature of group interaction with regard to locational decisions. The total number of players must be at least fifteen, and an ideal number would fall between thirty and sixty. The three major sections of the paper are: 1) the game materials in their entirety; 2) instruction and comments on the organization of the game, illustrating possible outcomes and points to be highlighted in class discussions; and, 3) a commentary on one play of the game. The game has been played primarily with undergraduate students, but it is equally instructive for individuals more directly involved in locational decisions. (Author/JLB)

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Discussion Paper No. 22

PORT SIVAD: A LOCATIONAL DECISION GAME
FOR A NOXIOUS PUBLIC FACILITY

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August 1971

DISCUSSION PAPERS ISSUED

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21. John Hultquist, John Holmes, Lawrence A. Brown, "CENTRO: A Program for Centographic Measures."
22. John F. Jakubs, Paul E. King, George A. Davis, Lael Adams, "Port Sivad: A Locational Decision Game for A Noxious Public Facility."

* Papers out of print.

This paper was initially prepared for a seminar in urban problems held at Ohio State University in the winter quarter of 1971, directed by Lawrence A. Brown. A number of objectives motivated the seminar: (1) To orient the student towards a world-at-large, user clientele as well as a social science clientele; (2) To identify problems that are meaningful to the user and amenable to social science approaches; (3) To learn to attack those problems in a practical manner; (4) To learn to work with the user towards implementation. The overall objective, then, was to make the student aware of his capabilities for contributing to the understanding, amelioration, and solution of existing problems of the contemporary world.

One aspect of the seminar consisted of informal discussions with guests who represented community interests in Columbus. Together these people provided an insight and perspective on urban problems that is rarely encountered in single individuals. Included were representatives of Battelle Memorial Institute, City National Bank, Columbus Area Chamber of Commerce, Columbus Department of Development, Columbus Department of Police, Columbus Model Cities Program, State of Ohio Bureau of Employment Services, and State of Ohio Department of Development. For this aspect, the seminar met jointly with a group from the Manpower and Management Sciences Program of the University. directed by Robert Miljus.

A second aspect of the seminar consisted of the following student projects:

1. Availability of Medical Services: A Comparative Study, by Joseph Barcic, Marketing; David Beever, Marketing; Dan Perin, Geography; Virginia Sharp, Geography.
2. Day Care Centers in Columbus: A Locational Strategy, by Robert W. Cobb, Geography; Ronald Doyle, Geography; John Holmes, Geography; John M. Matson, Geography; Karen Walby, Geography; and Forrest B. Williams, Geography.
3. Port Sivad: A Locational Decision Game For a Noxious Public Facility, by Lael Adams, Urban Planning; George A. Davis, Education and Geography; John F. Jakubs, Geography; Paul E. King, Geography.

These reports were prepared with the stricture that they focus upon a contemporary problem of the world-at-large in a manner useful to people directly affected by, or making decisions about alternative approaches to, that problem. The one presented here provides an educational game that points out the complexities of locational decisions and indicates ways in which those decisions might be influenced by various citizen groups, both public and private. The game has been played primarily with undergraduate students, but it is equally useful and instructive for individuals more directly involved in locational decisions.

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I. INTRODUCTION

Port Sivad is a role-playing game simulation concerned with the location of noxious public facilities. Specifically the objective is to locate a sewage plant as quickly as possible in a hypothetical urban area. Play involves government bargaining, citizen reaction and possible side-payments. Players have both public and private objectives which may or may not be in conflict with each other. Designed as a heuristic device, the game focuses upon a number of issues: 1) inequities in the spatial allocation and distribution of noxious public facilities, 2) the effect of citizen organization on governmental decision-making processes, 3) the potential influence of money power upon politics, 4) civil disobedience as an instrument of power, 5) the pressure that time imposes upon decision makers, and of course, 6) the overall nature of group interaction with regard to locational decisions.

There are fifteen major game participants in Port-Sivad and they are assigned roles as government officials, as representatives of citizens from a middle to upper income suburb (Northshores), or as representatives of citizens from a lower income inner city neighborhood (River End). Both Northshores and River End are potential sites for the proposed sewage plant. The major roles are as follows:

GOVERNMENT ROLES

	The Mayor
	Chairman of city council
CITY COUNCIL	Representative on city council from Northshores
	Representative on city council from the area of present sewage facilities
	Representative on city council from River End
	City councilman at large

DEPARTMENT OF PUBLIC WORKS	Head of the Department of Public Works Director of the Division of Sewerage and Drainage The Chief Engineer
----------------------------------	---

CITIZEN ROLES

NORTHSHORES CITIZENS GROUPS	Representative of the Northshores Assembly to Protect our Wilderness President of the local chapter of the Daughters of the American Revolution (D.A.R.) Representative of the Crofton Hills Community Action Committee
RIVER END COMMUNITY GROUPS	Lawyer affiliated with the American Civil Liberties Union (A.C.L.U.) Representative of the River End Community Council Representative of the Sivad Teachers Union

An unlimited number of minor participants can be included by assigning them as evenly as possible as members of the six citizen groups. The total number of players must be at least fifteen, and an ideal number would fall between thirty and sixty.

Port Sivad has an extremely flexible structure. This permits the game director to utilize his knowledge, experience and ability with regard to urban decision processes.

What follows in the next three sections are: 1) the game materials in their entirety, 2) instructions and comments on the organization of the game, illustrating possible outcomes and points to be highlighted in a general class discussion, and 3) a commentary on one play of the game, including an assessment of the outcomes. It is suggested that the reader at least become familiar with the "Players' Background Information" (pages 3 to 8) and some of the roles, since reference is made to the game package throughout the final sections of this paper.

II. GAME MATERIALS FOR PORT SIVAD

All game participants receive the Players' Background Information on pages 3 to 8. What remains goes only to those assuming the role presented.

A. PLAYERS' BACKGROUND INFORMATION

Port Sivad (population 750,000), your city (see Figure 1), is rapidly approaching a crisis state regarding the problem of sewage treatment. Additional facilities are desperately needed. The present plant receives the raw sewage, treats it, and returns the liquid to nearby Lake Rochelle. The sludge is used as fill-in for reclaimed swamp and marshland on the Eastern shore of the lake.

It is known that the Department of Public Works is about to release its recommendations as to what action should be taken. Further, it seems that the newspapers have published the results of the 12-month study just completed by O. Diferous and Son, Engineering Consultants. This work, carried out at considerable public expense, under the auspices of the Department of Public Works, recommended the construction of a new treatment plant, to be located at either Northshores or River End, as shown on the accompanying map. Although the above study concluded that construction of a new facility was preferable to renovation of the existing one, cost figures for such an alternative were published as well.

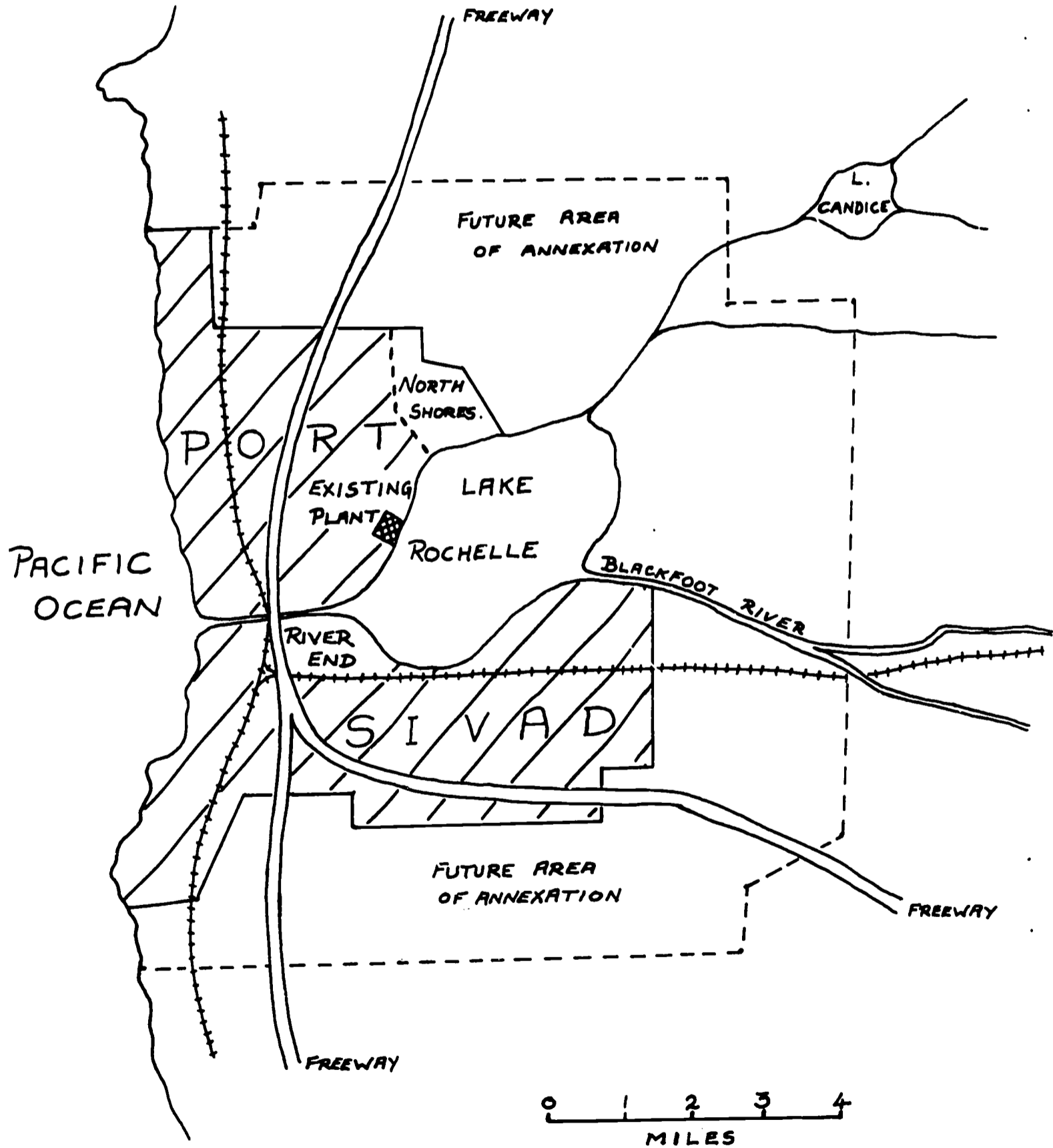
ESTIMATED COSTS FOR ALTERNATIVES*

COST TYPE	NEW PLANT AT RIVER END	NEW PLANT AT NORTHSHORES	RENOVATION OF EXISTING PLANT
Land Acquisition	\$300,000	\$100,000	\$100,000
Building Construction & Repair	\$200,000	\$200,000	\$250,000
Laying of Mains	\$200,000	\$300,000	\$500,000
TOTAL	\$700,000	\$600,000	\$850,000

*As appeared in the Port Sivad Chronicle, three days ago.

It should be understood that the area of Northshores is mostly empty land; what development there is consists of expensive, single-family dwellings with extremely large lots. River End, on the other hand, is thickly-settled, composed of once-higher class type structures which now are outmoded, and for the most part, in a state of disrepair,

FIGURE 1: PORT SIVAD



or "blight". The resident population suffers from a high unemployment rate, and even the employed are characterized by less than average income levels. Crime is a major problem within the area, and reports have indicated that drug abuse and addiction are "rampant."

The claim has been made that the most modern sewage treatment plants, if properly managed, cause no ill effects on the surrounding area. However, if you have ever been near a typical plant, you most likely experienced a disgusting stench, which results in the nearby areas being less desirable from a number of standpoints: for business, residential, and often even industrial uses. A sewage treatment plant is indeed a "noxious" facility.

Each of you has some role to play in this question of location of the proposed plant. These roles are spelled out in detail on the accompanying sheets. Your motives are specified, as are your responsibilities, and some of your alternatives. The required steps involved in the governmental decision are presented in Figure 2. You may, however, conceive of additional actions to achieve your goals -- it's up to you to work out a plan of action.

The roles have been arranged into the following groups:

- 1) the Department of Public Works, composed of the Director, the head of the Division of Sewage and Drainage, and the Chief Engineer;
- 2) City government, with five City Councilmen and the Mayor;
- 3) citizens residing at Northshores, including three "citizen-action" groups and their respective chairmen: Northshores chapter of the D.A.R. (Daughters of the American Revolution), Crofton Hills Community Action Committee, and the Northshores Assembly to Protect our Wilderness;
- 4) the River End Community Council;
- 5) the local American Civil Liberties Union (A.C.L.U.); and finally
- 6) the Sivad Teachers' Union.

Play of the Game

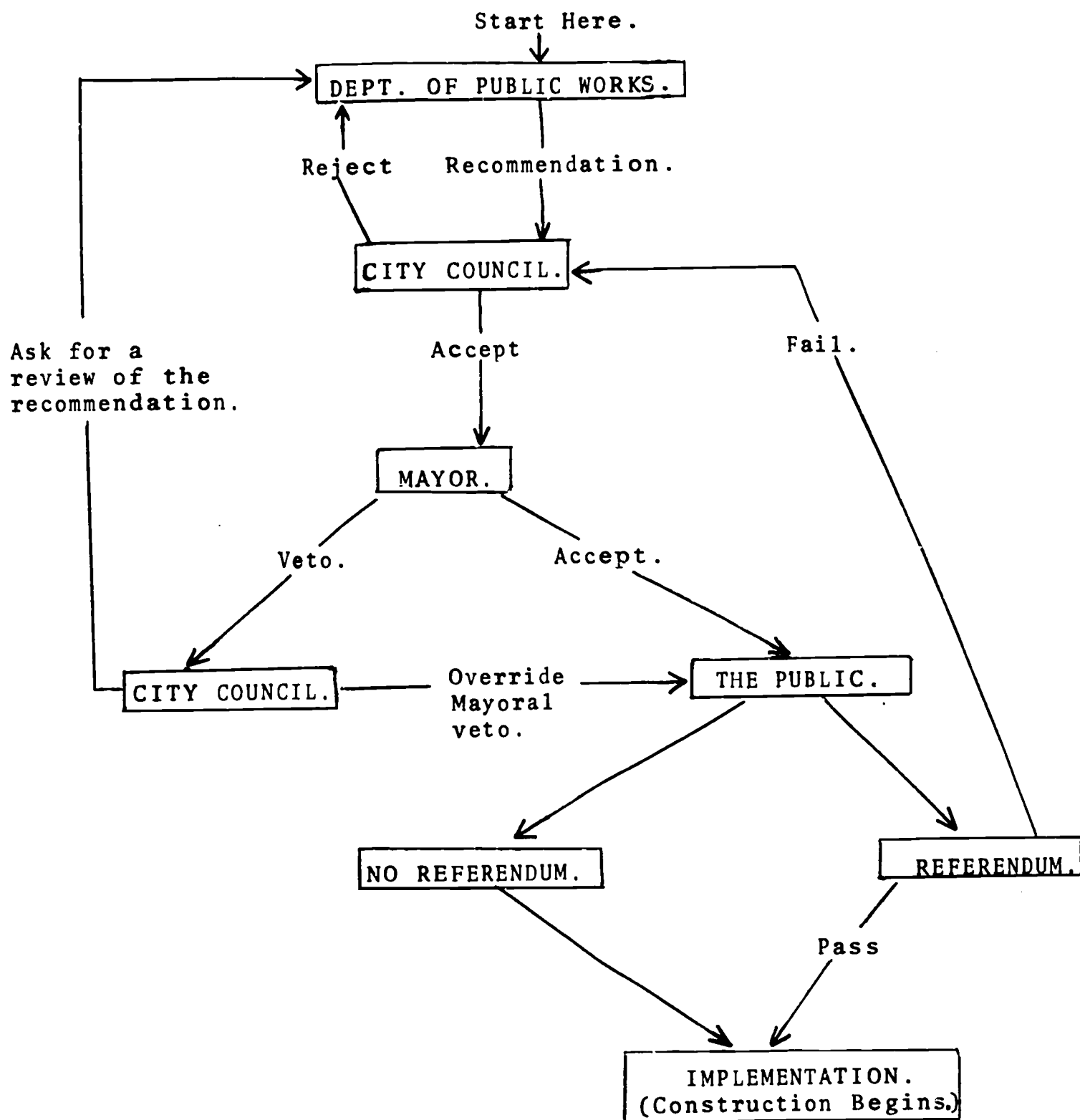
The game is structured in terms of three-minute intervals. Each of these corresponds to a week. During the three-minute time intervals, all actions or statements by any group are submitted to the Game-Overall-Directors (G.O.D.s) privately. At the end of the period, the "week's" activities, as well as possible extraneous information and events, are made public by means of a "news broadcast" on the part of the G.O.D.s.

At any time, if you want to talk to a person who is seated too far away for normal conversation to take place, please send a note to them -- do not leave your chair. The only players allowed to leave their chairs are the City Councilmen and the Mayor. Sheets of paper will be provided. Notes can be sent by means of the G.O.D.s or by passing them around the room, from seated player to seated player.

Outcome and Evaluation

Each of you has been provided with a payoff table. The figures differ from person to person, so do not let anyone see

FIGURE 2: THE STRUCTURE OF THE GOVERNMENTAL DECISION.



your payoff table! In fact, it is not to your advantage to let any of your personal information out -- it's your private information. Public information about all the players and groups appears on the "Public Images" sheet.

The payoff table is composed of points - you are interested in obtaining as many points as possible. No points are given until the end of the game. At that time, a certain sequence of events will have taken place. This sequence of events will appear somewhere on the payoff sheet, and you will then count up your total number of points. For instance, suppose you have the following partial payoff table:

River End site	300 - 10(t)
River End site + \$50,000	200 - 10(t)
Northshores site	0 - 10(t)
Civil Disturbance	-30
Riot	-100

Suppose the game 1) took 23 weeks to complete, and the final situation was that 2) the River End site was selected, with a \$50,000 allocation of public funds for recreational facilities, and there had been 3) one riot and two minor civil disturbances. Then, given that t is equal to the number of weeks taken for the game to reach a conclusion, your payoff would be:

$200 - 10(23 \text{ weeks}) - 2(30) - 1(100)$, or -190. Here, since your outcome in terms of points was negative, it could not be said that the game had gone your way, or, that you had done an adequate job, whatever your role had been.

Familiarize yourself with your personal payoff table; it should roughly follow the verbal description of your desires, motives, and personality which accompanies it.

Note: One more thing should be made clear - "civil disobedience" can be of two types: 1) demonstrations by the citizens of River End, led by the River End Community Council, and termed a "minor civil disturbance", and 2) a boycott by the Sivad Teachers Union, also called a "minor civil disturbance". However, should both these "minor civil disturbances" occur simultaneously - (within the same week) - then the situation is no longer one of minor civil disobedience, but a riot ensues.

The Public Images Of The Major Game Participants.

RICHARD J. KNIGHT. (Mayor of Port Sivad.)

Richard Knight is a member of the majority party in Port Sivad and is a relatively youthful and competent administrator. His first full term will soon be over, but during the last four years he has successfully dealt with several potentially tricky issues. His annexation policy has proceeded smoothly and he has been successful in attracting new business and industry into Port Sivad. His relations with the business

community are extremely cordial and he has retained the support of much of his electorate. A generally popular and dynamic mayor.

RUTH SIMPSON. (Madame Chairman of City Council.)

Not generally considered a dynamic figure in Port Sivad politics, but one who has worked steadily and quietly in her many roles in city government. Her election to city council chairwoman was seen by many as a just reward for many years of service to the community.

GREGORY DUVAL. (Representative on City Council for the Northshores area.)

A resident of Northshores and a member of the minority party in city council, he has little reputation apart from following the party line on virtually every issue.

RONALD PEARSON. (Representative on City Council from the area surrounding the existing sewage plant.)

A dynamic and well-known member of City Council, always willing to talk to the press and talk openly with T.V. interviewers. He has been actively involved in the Model Cities program in Port Sivad and is proud of his voting record in favor of social issues that have come before council. A well-known figure in the city and a resident of Northshores. It is rumored in the press that he may have his political sights aimed higher than city government.

GEORGE W. SHIPLEY. (Representative on City Council from River End.)

The token black on City Council who has been a vocal dissenter on many issues that have passed through the council chamber. He is generally considered to be a troublemaker by the more conservative elements of Port Sivad.

CHARLES BRADSHAW. (City councilman at large.)

A member of council who divides his time between the council chamber and his real estate firm, the Pacific Realty Company. He is an entrenched member of the Sivad Chamber of Commerce, a well-known businessman, but little-known politician.

RANDOLPH BACON. (Head of the Department of Public Works.)

A mature, responsible and dedicated public servant who has worked in Port Sivad's government for many years. He is believed to wield a considerable amount of power in city hall, but is respected by his peers and the citizens in general for his integrity in dealing with public issues.

PAUL WRIGHT. (Director of the Division of Sewerage and Drainage.)

Paul Wright has made an unprecedented rise within the city government, and at 28 is the youngest and best-qualified division head in the history of Port Sivad. He is an able and vigorous administrator, despite his tender years, and has successfully avoided making any serious enemies in his rise "through the system."

EDWARD NORTON. (The Chief Engineer.)

Another familiar and respected name in the city. Five years ago he was appointed chief engineer and things were running smoothly until rumors began spreading about the city's antiquated sewage treatment facilities. Edward Norton was quick to allay public concern by instigating the study, just completed by the consultant engineering firm.

JOHN "RED" BARON. (Spokesman for the Northshores Assembly to Protect our Wilderness)

"Red" Baron is known locally as a conservation buff, an avid outdoor sports enthusiast, and an outspoken defender of Lake Rochelle. He lives in Northshores, adjacent to the lake, and has organized the Assembly to ensure that the water and surrounding area remain unspoiled. The organization possesses considerable funds available for use in protecting the wilderness areas.

PRISCILLA WELLINGTON. (President of the local chapter of the Daughters of the American Revolution, D.A.R.)

Mrs. Wellington belongs to one of the best-known families in Port Sivad, and her name appears frequently in the society column of the Sivad Chronicle. She devotes much of her time to charitable activities as well as to organizing the local chapter of the D.A.R., acting as both the president and treasurer of the wealthy organization.

ROGER BROWN. (Spokesman for the Crofton Hills Community Action Committee.)

He is a relatively new arrival to Port Sivad, but lives in Crofton Hills, one of the exclusive areas of Northshores. He is a wealthy businessman, and within a short period of time has become a prominent local citizen taking an active role in the Community Action group. The organization meets to discuss issues that affect Crofton Hills, and to decide what action, if any, they can take to better the community they live in. They have accumulated a considerable sum of money in the local community chest, which they use to protect their interests.

PETER ASHTON. (Lawyer affiliated with the American Civil Liberties Union.)

He is a successful and dedicated young lawyer with what appears to be a promising future ahead of him. He spends much of his time representing underprivileged clients, and handles cases for the A.C.L.U. without a fee. In the past he has represented the River End Community Council, and provided legal advice for the Rev. James Shaw. The A.C.L.U. acts primarily as a guardian of individuals' civil liberties, and attempts to ensure that public officials, for example, do not violate any aspects of the Bill of Rights.

REV. JAMES SHAW. (Founder and spokesman for the River End Community Council.)

A well-known civil rights leader in Port Sivad, a resident of River End, and a spokesman for the people of that area. Respected by his followers, he was recently appointed to one of the mayor's advisory boards, and for some time has been actively fighting social ills through the regular governmental channels. He is the founder of the River End Community Council, a citizens group trying to improve the living conditions in that area.

MARIA CHAVEZ. (Spokeswoman for the Sivad Teachers Union.)

A teacher and resident of River End, Maria Chavez is an outspoken member of the Sivad Teachers Union, an offshoot organization from the more conservative Sivad Teachers Association. Considered by many to be an activist and troublemaker, she has frequently openly defied her superiors and taken radical steps on issues without waiting for support from her colleagues.

B. PLAYERS' ROLES

****Richard J. Knight, The Mayor of Port Sivad

You are the Executive Administrator of Port Sivad. You have held the position of Mayor for one full term, and as the incumbent in the upcoming election, you are presently "currying favor" with the electorate. You are a member of the majority party and are considered a "strong" mayor with a "weak" city council. Your constituents number 750,000, representing urban and suburban votes.

You are youthful (55), ambitious, and desirous of retaining your political power. You may even decide to run for State Governor in the next election.

Thus, the will of the people (especially the people with prestige,

money, and power) is your overriding concern. You have several choices available to you. You could pass city council's recommendation directly, or you could veto it. If your veto is invoked, four votes from the City Council will nullify it. Although unlikely, this overriding of a Mayoral veto would be an unpleasant turn of events, indicating that your power is not as strong as it may have seemed; you would lose face publicly.

Your feelings about the sewage plant issue are illustrated by your payoffs below.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	450-10(t)
River End Selected and \$100,000 worth of community facilities in River End	400-10(t)
River End Selected and \$200,000 worth of community facilities in River End	300 10(t)
Renovation of Present Site	250-10(t)
Northshores Selected	200-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	150-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	100-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	0-10(t)
Minor Civil Disturbance (each occurrence)	-50
Riot (each occurrence)	-200
Overruled by City Council (each occurrence)	-100
If game goes 25 weeks and ends with no solution	0-10(t)

***All 5 Members of City Council

You are one of five members of the present City Council, the principal legislative and policy-making authority of city government. As a member of this body, you will be responsible for deciding whether or not your city will increase its sewage disposal facilities; you will conduct a hearing on this topic which may be open or closed to the public at your discretion; and you will vote on whether

or not to include this project within the city's working budget. It is your responsibility, as an elected official, to consistently consider the need and costs of such a facility; to arrive at a decision as quickly as possible; and to decide upon the most propitious location, all factors having been considered.

The sewage treatment issue is really in the hands of the boys at the Department of Public Works. They will introduce the issue to council and you will have three options available: pass the proposal in favor of one of the alternative sites; veto the proposal by mustering 4 or 5 of your 5 votes; or pass the proposal subject to conditions imposed by you (see Figure 2). Of course, as elected officials, some of you are affiliated with a certain constituency -- you are their legal representative -- while others are council members "at-large."

****Ruth Simpson, The Madame Chairman of City Council

As City Council Chairman for the bustling metropolis of Port Sivad, it is your duty to lead your fellow council members at the scheduled meetings. After each issue before the Council has been adequately discussed, you have the responsibility of calling for a vote from each member.

You can understand why people might object to the construction of a sewage plant in their neighborhood, yet it has to be in somebody's neighborhood -- you really need the additional facilities. Maybe it should be placed in an area where there are few people -- but that means the north end of Sivad, which could result in spoiling the recreation aspect of Lake Rochelle. Yes, this might become a heated, talked-about issue. Well, if it does, you'd be best to keep an open mind, hopefully objective, and listen to the arguments of all sides involved. Your vote might just be a tie-breaker in this one.

Some additional information: You and your family reside in Northshores. Many of your friends belong to civic organizations such as the Northshores Assembly to Protect our Wilderness, and the Crofton Hills Community Action Committee. Your property fronts on the Lake, and your family makes frequent use of beautiful Lake Rochelle.

Finally, you are convinced of the desperate need to do something quickly about the current, disgraceful situation the sewage facilities are in; the people of Port Sivad deserve better!

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	680-20(t)
River End Selected and \$50,000 worth of community facilities in River End	630-20(t)

River End Selected and \$100,000 worth of community facilities in River End	580-20(+)
River End Selected and \$200,000 worth of community facilities in River End	480-20(+)
Renovation of Present Site	680-20(+)
Northshores Selected	150-20(+)
Northshores selected and \$50,000 worth of community facilities in Northshores	155-20(+)
Northshores selected and \$100,000 worth of community facilities in Northshores	160-20(+)
Northshores selected and \$200,000 worth of community facilities in Northshores	170-20(+)
Minor Civil Disturbance (each occurrence)	-25
Riot (each occurrence)	-100
If game goes 25 weeks and ends with no solution	0-20(+)

****Gregory Duval, City Councilman Representing Northshores

As representative to the City Council from the Northshores area, you are shocked that the Department of Public Works would even consider locating a sewage plant in or even near Northshores. The idea! It just isn't done; nowhere around the country do you find sewage plants in higher-class suburbs. The reasons are obvious and logical: were such a facility to be located in a more wealthy area, the property values would be affected considerably, while in the industrial areas, or in the filthy slums, a sewage plant would have little such effect.

Well, no need to worry; City Council would never pass such legislation. Why, most of the councilmen live in or near Northshores themselves -- and think what it would do to the Northern part of the Lake!

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	450-10(t)
River End Selected and \$100,000 worth of community facilities in River End	400-10(t)

River End Selected and \$200,000 worth of community facilities in River End	300-10(t)
Renovation of Present Site	150-10(t)
Northshores Selected	-1000 10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-950-10(t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-40
If game goes 25 weeks and ends with no solution	0-10(t)

***Ronald Pearson, City Councilman from the Present Sewage Plant Site

You are undoubtedly the most ambitious member of City Council, and perhaps the ablest as well. Your future sights are set on becoming the new State Senator next year. At this point, you have made many of the necessary political allies, and your fellow councilmen seem to approve of your voting record. The opinions and help of these people will become invaluable later on as the senatorial campaign begins.

Your constituency hails from the area in which the present facility is located. Expansion of this facility instead of construction of a new one elsewhere would anger the people you represent, and in general, would be a blow to your senatorial chances, for the public would lose faith in your ability to serve your constituency well.

Your home is near Northshores, but not near enough to be affected by selection of this area as the site, and of course selection of River End as the site would not affect you personally. However, in the last two years you have become actively involved with the Model Cities Program in Port Sivad, and have come to know many of the River End area civic leaders. You feel that the area should not be burdened, time after time, with noxious facilities which are needed for the city as a whole, but wanted by no neighborhoods at all.

There is one more consideration: your workers have been having considerable difficulty in coming up with money for your campaign fund. In the U.S. today, political campaigns are expensive ventures for those who take things seriously and want

to win. You've got to have a solid financial base before active campaigning begins, a few months from now.

PAYOFF TABLE

<u>FINAL OUTCOME</u>	<u>PAYOFFS</u>
River End Selected	200-10(t)
River End Selected and \$50,000 worth of community facilities in River End	250-10(t)
River End Selected and \$100,000 worth of community facilities in River End	300-10(t)
River End Selected and \$200,000 worth of community facilities in River End	400-10(t)
Renovation of Present Site	-500-10(t)
Northshores Selected	400-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	250-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	200-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	150-10(t)
Minor Civil Disturbance (each occurrence)	-25
Riot (each occurrence)	-100
If game goes 25 weeks and ends with no solution	0-10(t)

NOTE:

- 1) If you accumulate no campaign funds, you lose 500 points (-500)
- 2) For every \$100 you accumulate up to a total of \$50,000 you get 1 point toward removing your -500.
- 3) For every \$500 you accumulate over and above \$50,000 you may add 1 point to your total.

**** George W. Shipley, City Councilman Representing River End

You are the token black on City Council, and, unknown to your fellow council members, belong secretly to an underground militant group. You are seeking to destroy the establishment from within and this particular issue appears to be an excellent opportunity for you to strike a mark. You have two alternatives available to you: either promote the building of the plant at the inner-city site in order to instill ferment and rioting among the residents, or oppose it as being racially prejudicial that

this noxious facility be built in a low-income area rather than at the suburban site.

A compromise, expanding the present plant at its current site, is the most unfavorable action that could be taken, for this would just preserve the status quo-- what the fat-cats in Northshores and Crofton Hills want. You oppose such a compromise because the present site of the plant is also in a low income area. Rather than burden poor people with this nuisance, why not give the lily-white suburbs a taste of their own medicine -- why not start to fight back?

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-300
River End Selected and \$50,000 worth of community facilities in River End	-250
River End Selected and \$100,000 worth of community facilities in River End	-200
River End Selected and \$200,000 worth of community facilities in River End	-100
Renovation of Present Site	-300
Northshores Selected	250
Northshores selected and \$50,000 worth of community facilities in Northshores	0
Northshores selected and \$100,000 worth of community facilities in Northshores	-100
Northshores selected and \$200,000 worth of community facilities in Northshores	-250
Minor Civil Disturbance (each occurrence)	350
Riot (each occurrence)	500
If game goes 25 weeks and ends with no solution	0

***Charles Bradshaw, City Councilman-At-Large

As the sole realtor on the Council, you have oftentimes swayed the board to approve recommendations that would inevitably favor yourself in terms of the city's land development policies. You happen to own land in the vicinity of Northshores, and this area is potentially ripe for development. Sewage and water facilities would greatly enhance the value of the land. However, your 15 acres are directly downwind of the proposed Northshores location for the

new plant. This inevitably would decrease the value of your land for housing purposes.

For this reason, you vehemently oppose Northshores as the site for the sewage treatment plant. The River End site, while more favorable to you, would require that you pay the cost for sewage facilities within the area of your proposed development. The action you most prefer is expansion of the present facility at the existing site, for such expansion entails laying of many additional sewage mains at public expense, and your development area is included in the plans. Thus, the public would be sharing the expense of sewage facilities in this case. This would constitute a significant savings to you.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	600-10(t)
River End Selected and \$50,000 worth of community facilities in River End	500-10(t)
River End Selected and \$100,000 worth of community facilities in River End	400-10(t)
River End Selected and \$200,000 worth of community facilities in River End	200-10(t)
Renovation of Present Site	1000-10(t)
Northshores Selected	-300-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-250-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-100-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	+100-10(t)
Minor Civil Disturbance (each occurrence)	-25
Riot (each occurrence)	-100
If game goes 25 weeks and ends with no solution	0-10(t)

***All Three Members of the Department of Public Works

One of the largest sections of the metropolitan government, the Department of Public Works encompasses many divisions: the divisions of parks, utilities, public lands and buildings, engineering, sewerage and drainage, and others. Thus, while the Director of the Department of Public Works makes the final decision

regarding the major issues, he is very much dependent upon the technical "expertise" and more thorough knowledge of the various division leaders.

The three members of this group who are concerned with the question of sewage treatment facilities are: 1) the Chief Engineer, (Edward Norton) the man who is most familiar with the actual workings of the various existent facilities; 2) the Director of the Division of Sewerage and Drainage, (Paul Wright) again a man with considerable technical ability and knowledge, and 3) the Head of the Department of Public Works (Randolph Bacon). As is true in most localities across the country, the department head is elected while the other two are appointees of his.

The goal of this group is straightforward-- to provide adequate sewerage facilities to the entire urban population. As a result, the current need for additional facilities of one sort or another is indeed a pressing issue for this group. That the existing treatment plant is not sufficient for the city's needs is in fact a crisis--this group, more than all others, realizes that without some swift action, the possibility of a catastrophe looms. The total breakdown of the currently overloaded system, while disadvantageous to the city as a whole, is especially feared by the members of this department, for it would bring discredit and humiliation to the department as well as possibly costing some members their jobs. Also, you must keep in mind that a federal organization, The Environment Protection Agency, has the power (and the spirit), to bring a costly suit against the city should this occur.

***Randolph Bacon, The Head of the Department of Public Works

"Randolph Bacon - Mature, Responsible and Dedicated." - that was your campaign slogan fifteen years ago, and you have lived up to it. You have no further political motives; your only desire is to serve well in your present capacity. In fact, you pride yourself on being an exception to the rule that politics and honesty don't mix. Of course, your office does have a certain amount of status associated with it, and although you may hate to admit it, it's a nice feeling, having such a position of authority in a city like Port Sivad. Yes, you'd hate to lose it--what would you do? Where would you go from here? Too young to retire (for at least another five or ten years) you can't see yourself taking a lesser position within the government--you've been a leader for too long.

That's why the phone call bothered you so much. Good old Sam Price-- you went to school together--it sure was good of him to call from Washington and let you in on a "very secret" secret.

One of your most important divisions--sewerage and drainage-- is nearly ready to submit the plans for a sorely-needed new treatment plant. While a complete breakdown in the current system is

possible in the near future, should the plans be approved and quickly implemented, the chances of such an occurrence would be remote. So, until the call from Sam, all was moving smoothly. Now, however, the problem has become a bit more complex.

Many people knew that a new "total system" method of waste disposal was soon to be tested by a federally-funded project in some as yet unspecified city. Sam's news was that Port Sivad was very likely to be that city! Your first response was sheer delight, but now that you've begun to mull it over, you realize that you're sitting in a hot seat. If you approve the forthcoming plan, and action is begun on the city's own new facility, Port Sivad would no longer be a prime candidate for the federal project, for Sam told you that the city selected would be one currently in need of expanded sewage facilities. If Port Sivad gets the federal treatment system, your job would be secure for as long as you wanted it. However, were you to stall as long as possible, under some pretense or another, and the current plant break down on account of the overload, the federal government would sue Port Sivad for damages resulting from pollution, and your job would be in jeopardy come next year.

You cannot "pass the buck" and make Sam's news of Port Sivad's "good fortune" public, for such an announcement of a supposed congressional secret would only cost Sam his job, or if not his job, his chances for advancement, Port Sivad would not get the federal system of disposal, in all likelihood, and you yourself would hardly benefit, as the "blabbermouth".

So what can you do? - Well, you'd better talk matters over more carefully with Wright, as well as with Norton, without "spilling the beans". Find out what the chances are for a breakdown of the existing system. Maybe you can figure a way out of this yet. Why, of all the cities in the United States, did they have to pick Sivad?

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	175-5 (t)
River End Selected and \$50,000 worth of community facilities in River End	165-5 (t)
River End Selected and \$100,000 worth of community facilities in River End	155-5 (t)
River End Selected and \$200,000 worth of community facilities in River End	145-5 (t)
Renovation of Present Site	175-5 (t)
Northshores Selected	175-5 (t)

Northshores selected and \$50,000 worth of community facilities in Northshores	165-5(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	155-5(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	145-5(t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-25
If game goes 25 weeks and ends with no solution	0-5(t)

***Paul Wright, The Director of the Division of Sewerage and Drainage

You, Paul Wright, have come up "through the system" as rapidly as possible. Your ability to make friends is one of the factors which have allowed you to progress so quickly that, at twenty-eight, you are the youngest division head in the history of the City's government.

Your ambition, unknown to all, is to acquire as much political power and prestige as possible. You know, for instance, that having a man of your ability as mayor would thrust Port Sivad into the limelight across the state, for you are an adept and skillful administrator, have a knack for taking the right action at the right time, and you are able to develop many interesting and innovative ideas.

Your goals go beyond City Hall, to the Statehouse and perhaps even to the Nation's Capital. In fact, one of your most pleasant thoughts is to visualize yourself as the Junior Senator from your state, introducing legislation to the Senate floor.

But, for the time being, an immediate objective is to acquire more public exposure. You feel that you must gain the public's attention well before the next election.

Sam Price, an influential friend in Washington, D.C., has confidentially let it be known to you that Port Sivad has an excellent chance to be the proving ground for a radically innovative waste treatment plant. In fact, he has told you privately that as long as Port Sivad is in such grave need for additional facilities, its chances for obtaining the new system, a federally-funded one, are extremely good. However, were actual work to begin on the construction of an additional plant by the city itself, Port Sivad would not even have a prayer of being chosen as the first city in the nation to have such a system. You realize the risks involved in stalling new facility implementation, for a dangerous situation would arise should a heavy overload arise once again. However, with such an occurrence, your depart-

ment head would take most of the blame in public, and you might well succeed him at that post. But more than anything, you want to be the one most responsible for bringing in the exciting, novel, federally-funded total waste treatment complex. You want to make it "your baby".

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-435+20 (t)
River End Selected and \$50,000 worth of community facilities in River End	-445+20 (t)
River End Selected and \$100,000 worth of community facilities in River End	-455+20 (t)
River End Selected and \$200,000 worth of community facilities in River End	-465+20 (t)
Renovation of Present Site	-435+20 (t)
Northshores Selected	-435+20 (t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-445+20 (t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-455+20 (t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-465+20 (t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-25
If Game goes 25 weeks and ends with no solution	+800

***Edward Norton, The Chief Engineer

You, Edward Norton, have been active in city government for 25 years, and your career has been a laudable one. You have functioned well for the past five years as the chief engineer. In the future, your hope is to be elected city manager of Bancroft, a small peaceful little town about twenty miles from Port Sivad.

In the meantime, a longtime friend of yours, Sam Price, has recently informed you discreetly (and for Sam's sake, the information should be kept private) that Port Sivad has a good chance of being named recipient of a large, federally-funded project involving the implementation of a radically new type of waste treatment center. (Sam's in Washington now, and has a lot of friends there,

he must have gotten the information firsthand). Were Port Sivad not in such need of additional facilities, undoubtedly its chances for the distinction would be nil.

Although you are a conscientious public servant, and do want the best for all citizens concerned, you feel that the new type of waste disposal plant has not yet been fully tested, and as such involves risks which may outweigh the benefits to be obtained. Also, and more important to you personally, the acquisition of this innovative-type of facility would lessen your own position in terms of importance and status, for this facility involves a totally new type of technology, something with which you are not familiar and which would take years to learn. Were the federally-funded project awarded to Port Sivad, then, you might very well find yourself out of work. Losing your job in such a manner would not help you win the city manager's job in Bancroft, for the electorate of that town would not want a man who could not hold down a city engineer's position to be the head of their town government.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	400-20(t)
River End Selected and \$50,000 worth of community facilities in River End	390-20(t)
River End Selected and \$100,000 worth of community facilities in River End	380-20(t)
River End Selected and \$200,000 worth of community facilities in River End	370-20(t)
Renovation of Present Site	400-20(t)
Northshores Selected	400-20(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	390-20(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	380-20(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	370-20(t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-25
If game goes 25 weeks and ends with no solution	0-20(t)

***The Representative and All Members of the Northshores Assembly to
Protect our Wilderness

In this age of wanton pollution, of destruction of the physical environment by men motivated only by the dollar, yours is one of the many groups which have sprung up across the country to speak out against this mindless waste, and to fight to save our skies and water.

Port Sivad is blessed with Lake Rochelle, which offers recreational advantages unknown to most large urban areas. Most of the industrial polluters lie along the Southwestern stretches of the lake, or are located along the estuary to the Pacific Ocean. Thus, nearly all of Lake Rochelle, especially the Northern area, remains fairly clean and provides boating, fishing, and water sports enthusiasts with ample opportunity to pursue these leisure-time activities.

You have always argued that the existent sewage plant is located too far north. In fact, a university study has demonstrated that this facility is one of the primary contributors to what pollution there is in the northern part of the lake, in spite of local government officials' statements to the contrary.

You realize that the "war against pollution" has a cost attached to it; for instance, should stringent anti-pollution laws be enacted against industries, you understand that this might well stunt the economic growth of your city. But you feel that in the case of Lake Rochelle and the sewage plant, the destruction of one of the largest fairly clean freshwater "urban" lakes has negative effects which far outweigh any positive considerations. In terms of dollars and cents, the recreation sector of the city's economy would be hurt critically, but even more fundamentally, you object to putting a monetary value on having a clean lake. Once polluted, the lake is lost to mankind not just for a few years, but for all practical purposes, forever.

In general, you as a group are dedicated to the preservation of a clean Lake Rochelle; specifically, you wholeheartedly oppose any location other than the River End site where the sewage effluent would be quickly washed out into the ocean, and would not endanger the lake.

Note: Your organization has a common fund of \$50,000, collected from the members, to use at your discretion. You must have at least 90% agreement before this fund, or part of it, can be put to use.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	500-10(t)

River End Selected and \$50,000 worth of community facilities in River End	450-10(t)
River End Selected and \$100,000 worth of community facilities in River End	400-10(t)
River End Selected and \$200,000 worth of community facilities in River End	300-10(t)
Renovation of Present Site	-375-10(t)
Northshores Selected	-1000-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-1000-10(t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-25
Expenses	-1 per every \$250 of fund spent
If game goes 25 weeks and ends with no solution	0-10(t)

**** John "Red" Baron, Representative of the Northshores Assembly to Protect our Wilderness

Your name is John "Red" Baron, and you have lived in the Northshores section of the city for about 8 years. While you agree with the goals and beliefs of the Northshores Assembly to Protect our Wilderness, unknown to any members of this group, you own property in that area of the city in which the present sewage plant exists. Should the current sewage plant be modified and expanded to meet present and future demand, you have discovered that expansion would require acquisition of your land. The value of this land is exceptionally low, due to the proximity of the constantly-overloaded sewage plant. If expansion of the plant were to occur, the government would offer you a price 3 times what you could otherwise obtain. Therefore, the payoff table for other members of the Northshores Assembly to Protect our Wilderness does not apply to you. Instead, you receive payoffs as below.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	450-10(t)
River End Selected and \$100,000 worth of community facilities in River End	400-10(t)
River End Selected and \$200,000 worth of community facilities in River End	300-10(t)
Renovation of Present Site	500-10(t)
Northshores Selected	-1000-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-1000-10(t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-25
Expenses	-1 per every 250 dollars spent
If game goes 25 weeks and ends with no solution	0-10(t)

***The President and All Members of the D.A.R.

The Daughters of the American Revolution (D.A.R.) is an organization steeped in the history of the American struggle for independence. You and your fellow members are descendents of the brave revolutionaries. Membership is passed from mother to daughter and as such remains very self-contained; for instance, all of your members are white, and Protestant Episcopalian, and most of you live on the north side of town. Actually, it makes a nice group for social purposes -- common interests, you know.

Five years ago, the D.A.R. waged a terrific battle against townhouse development in Northshores and won! Last year, a tract of attractive and expensive townhouses was constructed at the city's northern edge -- some members are still vociferous in their dislike of "rowhouses" and the issue has tended to split members into two camps.

Under direction of your newly elected President, Priscilla Wellington, the group could once again be reunited under a common cause. As a group you generally are not willing to take a stand on an issue unless you feel you have some chance of success. What are your feelings on the proposed sewage treatment plant?

The D.A.R. is deeply concerned about the behavior of the Sivad Teachers Union. It seems they are involved in many activities which do not concern the schools and the education of the young people of Port Sivad. In fact, it seems possible that rather than giving students the education their parents are paying for, the major concern of the Sivad Teachers Union is causing social turmoil!

It is becoming more and more clear that the S.T.U. is bent on disrupting the normal governmental process. Such actions can only be termed subversive, and if continued, should be investigated - a matter which may be of interest to the F.B.I. or the House Committee on Internal Security!

Note: Your organization has \$50,000 set aside for "miscellaneous projects" which you may use at your discretion. However, your group must have at least 90% agreement before any or all of these funds may be utilized.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	450-10(t)
River End Selected and \$100,000 worth of community facilities in River End	400-10(t)
River End Selected and \$200,000 worth of community facilities in River End	300-10(t)
Renovation of Present Site	500-10(t)
Northshores Selected	-1000-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-1000-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-1000-10(t)
Minor Civil Disturbance (each occurrence)	-50

Riot (each occurrence)	-150
Expenses	-1 per every \$250 spent
If game goes 25 weeks and ends with no solution	0-10(†)

****Priscilla Wellington, The President of the Local Chapter of the D.A.R.

You are Mrs. John W. Wellington III, a fifty-five year old suburban-type housewife whose husband is a vice-president at Port Sivad's largest bank, The First National.

Your major objection to the building of the Sewage treatment plant at Northshores appears to stem from your belief that it would reduce property values, as a consequence you and "Wellie" would lose some of your \$200,000 investment. You are further convinced that you would no longer be able to enjoy the beauty of your scenic property.

You do have one other concern which you have not mentioned publicly. For some time you have been worried about keeping the "right" type of neighbors. Your husband has received information that there has been some land speculation in the area of Northshores. You have also heard the land may be used to construct a moderately priced housing development. Secretly, you are in a quandry, for you must choose between the lesser of two evils. As the president of the local chapter of the Daughters of the American Revolution (D.A.R.), you must decide the best approach to use with the ladies in order to rally them to the cause.

Your payoff table is the same as that of the other D.A.R. members.

****The Representative and all Members of the Crofton Hills Community Action Committee

The history of this organization is brief: you banded together a few years ago in order to oppose a proposed housing development designed for Crofton Hills, a part of the Northshores area. At that time, a private developer from elsewhere in the state was about to begin construction of a massive suburban residential program. The houses were to be of relatively low quality - in the 15-25 thousand dollar bracket. Many of the residents of Crofton Hills were disturbed at this prospect, and you, the more active citizens, set up this organization. By threatening court action against the developer (along with pulling a few strings!), you were able to stop the project, forcing it to the southern part of Port Sivad.

Now, another issue has again caused alarm in this area - the possibility of the establishment of a sewage treatment plant nearby. You as a group oppose this wholeheartedly.

Crofton Hills, like the Northshores area in general, is a very pleasant place to live. There is no crowding, no hustle and bustle of the everyday world, and it's a safe place to be -- the danger of crime and other sordid aspects of life are alien to the area. This is only rightfully so, for you have led successful lives (the average income in the area is \$35,000) and you should be allowed to reap some rewards from your success. You can afford to pay for excellent police protection -- protection for yourself and your property (the average sale price of homes in Crofton Hills is \$65,000). And, of course, the area is prestigious. Everyone would be proud to be able to say, "My children go to Northshores High School", or, "Yes, we're from Crofton Hills," and you are no different.

Your stance on some of the so-called "social ills" existing in the country, even in Port Sivad itself, would probably be called "conservative". Intelligent, well-educated, you do recognize these issues to be problems, but your general feeling is that you made it through the system, why can't others? In other words, you understand that the world is highly competitive almost like "survival of the fittest" -- and in such a competitive situation, there are always winners and always losers. No matter how much certain segments of the population are "helped" -- if it is any help at all -- there will always be poor people, or people worse off than the average. The definition of "poor" might change, but there will always exist certain people who are, by whatever the current definition is, poor.

Thus, your stance on taxes is as follows: if tax money is used to help everyone, it is just. But you resent having to "pay the freight" -- and you are taxed heavily, being in some of the higher brackets when the money is used only for certain segments of society.

Note: Your organization has at its disposal a Community Chest fund of \$50,000 acquired from local residents to use at your discretion. You must, as a group, have 90% agreement before part or all of the funds can be put to use.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	1000-10(t)
River End Selected and \$50,000 worth of community facilities in River End	400-10(t)
River End Selected and \$100,000 worth of community facilities in River End	0-10(t)

River End Selected and \$200,000 worth of community facilities in River End	-100-10(t)
Renovation of Present Site	500-10(t)
Northshores Selected	-700-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-700-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-700-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-700-10(t)
Minor Civil Disturbance (each occurrence)	-10
Riot (each occurrence)	-25
Expenses	-1 per every \$250 spent
If game goes 25 weeks and ends with no solution	0-10(t)
**** <u>Roger Brown, The Representative of the Crofton Hills Community Action Committee</u>	

You are Roger Brown, a 40 year old tycoon, who has lived in the community for only two years. Along with your fellow representatives you are concerned with the possible decline in property values should the sewage treatment plant be located in the Northshores section.

Unknown to all others you are a partner in a land development corporation.

The United Land Development Company is a holding company which owns the Pioneer Homes Corporation and the Colonial Realty Company. The land development company has an option to buy a hundred acres in the Northshores section including the seventy which would be used by the city for constructing the sewage treatment plant.

The plans are to build 100 \$30,000 - 45,000 homes on 1/2 acre plots and develop extensive recreational facilities both indoor and out. If the city decides to build in Northshores, there may be no chance for you to "cash in."

Your payoff table is the same as that of other members of the Crofton Hills Community Action Committee.

*** Representative and All Members of the Local Chapter of the American Civil Liberties Union

As members of your state's chapter of the A.C.L.U. you represent a diverse group socially and politically but a group united in the purpose of preserving and strengthening the freedoms guaranteed under the Bill of Rights. You believe that no individual should have the privilege of deciding who is deserving of the rights guaranteed by the Constitution and who is not; rather, you believe that these rights are due to everybody without exception. Yours is a nonpolitical organization with the sole purpose of preserving individuals' civil liberties.

Your members come from all walks of life; however, many of your activities are conducted in the courts where your affiliated lawyers serve with no payment. There is a long list of cases in your own state where the A.C.L.U. has successfully combatted vested interests, fighting for, and winning the rights of freedom of the press, freedom from censorship, free speech, fair trial and the due process of law, civil rights, freedom of religion, freedom of assembly and academic freedom. In fact, only recently, Peter Ashton (your most promising lawyer) successfully defended two student leaders from Sivad State College who had been suspended for leading student dissent.

Another of your significant functions is to act as public "Watchdogs," keeping an eye on public officials and particularly checking on local court procedure. Frequently you have been able to avoid court action by direct contact with public officials, bringing pressure to bear to get implementation of better policy for the protection of local rights. You also conduct an active advertising campaign through newspapers, T.V., pamphlets and public addresses, attempting to keep government and individuals on their toes where civil liberties are concerned. Your funds are accumulated from membership dues and donations.

At present, as a group, you are concerned about the imminent proposal about the location of a new sewage plant in Port Sivad. You are aware of the two proposed sites and from previous cases of a similar nature are aware that local government is not always above board in its dealings with affected citizens. Occasionally proposals are kept very quiet, and not infrequently too little time is allowed for citizens to organize and have some say in developments which directly affect them.

In the present case you are afraid that the mayor and city council will attempt to force through the proposal for the River End site without permitting the residents to voice any effective opinion about the matter. Several of you have strong personal reservations about locating such a noxious facility in this very densely settled part of the city. So far there is nothing concrete to work on, however, you are keeping a sharp eye on developments, and Peter Ashton is working closely with the River End Community Council to ensure that the poorer, more disadvantaged

people in your city are not exploited in this situation.

To file an injunction, at least 75% of your group must agree, and you must have the backing of the River End Community Council.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-300
River End Selected and \$50,000 worth of community facilities in River End	-300
River End Selected and \$100,000 worth of community facilities in River End	0
River End Selected and \$200,000 worth of community facilities in River End	250
Renovation of Present Site	200
Northshores Selected	500
Northshores selected and \$50,000 worth of community facilities in Northshores	100
Northshores selected and \$100,000 worth of community facilities in Northshores	0
Northshores selected and \$200,000 worth of community facilities in Northshores	-100
Minor Civil Disturbance (each occurrence)	-25
Riot (each occurrence)	-100
Court Injunction Successful	500
Court Injunction Unsuccessful	-100
If game goes 25 weeks and ends with no solution	0

****Peter Ashton, The Representative of the A.C.L.U.

Peter Ashton (32) - a successful and dedicated young lawyer affiliated with your state's chapter of the A.C.L.U. You possess what most people would call a strong "social conscience" and spend a considerable amount of your time representing underprivileged individuals and groups for nominal fees in addition to serving on A.C.L.U. cases without payment. In the past you have provided legal consultation for the Rev. James Shaw and his River End Community Council. However, in addition to your desire to help people less fortunate than yourself you have a certain amount of personal ambition and derive a considerable amount of gratification from seeing your name in the papers, particularly when

you have just won a case. Your desire for prestige is not completely selfish, however, for you feel that you could do much more to correct social injustices if your name was well-known.

Recently the Rev. Shaw has contacted you again concerning the new proposal about Port Sivad's sewage problem. He was concerned that River End appears to be under consideration as a prospective site for the location of a new plant. This in itself does not directly fall under the jurisdiction of the A.C.L.U., but you are aware from past experience that city government may sometimes attempt to "railroad" a proposal through without allowing any time for opposition to be voiced. You intend keeping a close watch on the events of the coming weeks, keeping in contact with the Rev. Shaw and his council to ensure that the correct procedures for such a planning proposal are followed.

You are aware that if the plant is proposed for River End, then implementation could be arrested by a court injunction, and blocked completely if a strong enough defense was mounted and the case won. If you were to take on such a case and win, it would no doubt bring you a lot of publicity not only in Port Sivad but also in other cities along the west coast. However, for such a case to be successful and to gain support of the A.C.L.U. there must be clear evidence that the civil liberties of the residents of River End are being violated. In such a case as this proving that discrimination or unfair treatment was in fact present might be very difficult. Thus you would reserve court action as a last resort, and only if you felt the city officials had dealt unfairly with the River End community. You know from experience that planners backed by city hall are able to drag out such cases until local residents run out of money and have to withdraw. You are also aware that the ACLU funds are not unlimited. A failure in such a case would neither block the proposal nor provide you with good publicity.

However, again you are aware that the threat of a court injunction is sometimes sufficient to keep public officials on their toes and to prevent them from keeping important details hidden from the public. Thus you are firmly convinced that the new plant should not be located in an area that is already disadvantaged in so many ways and you intend to see that the inner city residents are dealt with fairly and justly. You are anxious to come up with any action which would successfully block the sewage plant location in River End, keeping court action as a "last ditch" measure. If it comes to that, you will have to persuade the local A.C.L.U. that this is a just cause, and be sure that you will not ruin your career.

Should you bring suit against anyone in the matter of the sewage plant, your finances will cover at least 4 weeks, and perhaps up to 9 weeks. The exact length of time will be made

known to you only after the case commences.

Without stalling tactics on the part of the opposition, the average length of time spent in court is three weeks.

The payoff table for other members of the A.C.L.U. does not apply to you. Instead, you receive payoffs as below.

PAYOFF TABLE

FINAL OUTCOMES

PAYOFFS

River End Selected	-300
River End Selected and \$50,000 worth of community facilities in River End	-300
River End Selected and \$100,000 worth of community facilities in River End	100
River End Selected and \$200,000 worth of community facilities in River End	250
Renovation of Present Site	100
Northshores Selected	600
Northshores selected and \$50,000 worth of community facilities in Northshores	100
Northshores selected and \$100,000 worth of community facilities in Northshores	0
Northshores selected and \$200,000 worth of community facilities in Northshores	-100
Minor Civil Disturbance (each occurrence)	-50
Riot (each occurrence)	-100
Court Injunction Successful	500
Court Injunction Unsuccessful	50
If game goes 25 weeks and ends with no solution	0

**** The Representative and All Members of The River End Community Council

You are a resident of River End; however, unlike a good number of people in your area you are convinced that you can have some say in the way things are run in Port Sivad, particularly in matters which directly affect your community. You joined the River End Community Council because you felt that too many of the decisions concerning your area were being made by people who live outside

the community such as the landlords, local business owners and politicians at city hall who appear to have little concern for the well-being of the local residents. The prime example, a few years ago, was the proposed freeway which was to pass right through the center of the community. Incidentally, at that time the Rev. James Shaw formed the Community Council and managed to make a public issue of the matter, forcing re-location of the highway further to the south of the city center. Unfortunately, your area is "boxed in" by the lake, the railroad, and the freeway, but that is better than having the neighborhood cut completely in half, not to mention the homes that would have had to have been torn down.

You realize that River End is not an ideal place to live; the newspapers call it a slum, but to you it is home, the area where your family and friends live, and where you can get credit at the corner store. There are many things in the community which are admittedly undesirable; for instance, many of the houses are dilapidated. The demand for housing is so great that landlords do not have to bother to fix the places up, and if one family moves out there are always three more willing to move in. Also, crime has become a major problem and drug addiction is growing and receiving a lot of attention in the press.

In the past there has been talk of urban renewal in River End, but you have seen examples of this in other parts of the city where high-rise apartments were built with rents so high that no local residents could afford to move in. You are afraid of these sorts of plans because you can neither afford to move into the new buildings nor afford to move out of the area, and there is just nowhere else in the city to move to. So, aware as you are of the shortcomings of your area, you have to stay there.

You are disturbed by the general living conditions and have been working through the community council to try to improve the situation. You have been asking city hall for a community center for two years and have been trying to persuade landlords to perform needed repairs. The new proposed sewage plant has really outraged you, because it can only make local conditions worse. You already live near to the area of the city's major industrial activity — industries which belch out smoke and pour effluent into the river nearby. Consequently, the last thing you want is a sewage plant adding to the filth. You are angry as a group, and the rest of the residents are 100% behind you on this issue. You intend to fight this proposal in any way you can, and stop the city from building a sewage plant in your back yard!

Note: To implement a "minor civil disturbance" you need a 90% backing from within your own group. Also, to file an injunction, you need aid from the ACLU as well as a 90% backing from within your own group.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	-400-10(t)
River End Selected and \$100,000 worth of community facilities in River End	50-10(t)
River End Selected and \$200,000 worth of community facilities in River End	200-10(t)
Renovation of Present Site	200-10(t)
Northshores Selected	1000-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	100-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	100-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	100-10(t)
Minor Civil Disturbance (each occurrence)	-25
Riot (each occurrence)	-75
If game goes 25 weeks and ends with no solution	0-10(t)

***The Rev. James Shaw, Representative of the River End Community Council

As the Rev. James Shaw (58), you are a long-time resident of River End, well known and liked by the residents of the area. You have a long history of support for Civil Rights and have a strong belief in the equality of opportunities for everybody. You have been fighting all your life to try to right some of the injustices and imbalance that you see in society. At the same time you are deeply committed to a policy of nonviolence, and you believe that worthwhile change can come about by working through the system. It has been your lifetime goal to gain a footing within the system where you feel you could do the most for your cause.

Just recently you were appointed by the Mayor to an advisory board. This pleased you considerably since you feel you will now have a good opportunity to speak out for the River End residents. However, the very appointment has raised some criticism from some of the younger residents of River End, who believe that you do not take a hard enough time. They believe that the fact that you accepted the position indicates you will do exactly what the Mayor wants done. You know this is not true, and wish to prove it. This

could mean taking a harder stand on the sewage plant issue than you would really like; however you do not want to jeopardize your position on the advisory board.

You are well aware that a small faction of River End residents are quite willing to resort to violent protest, and might well attempt to sabotage the sewage plant if building were ever started in this area. Thus you wish to avoid this violence at all costs, but at the same time you wish to gain the respect of the young group who, you believe, can gain nothing by taking the law into their own hands.

You were the founder of the River End Community Council, and have been primarily responsible for maintaining support for it. You are anxious to prove that it can achieve something, you wish to counteract the general feeling in the neighborhood that things are hopeless, and that poor people are powerless to affect the course of city government, or in fact the course of their own lives.

Throughout the last 3 years you have consulted with Peter Ashton on legal questions, and once again you are in contact with him over this issue.

The payoff table for other members of the River End Community Council does not apply to you. Instead you receive payoffs as follows.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	-400-10(t)
River End Selected and \$100,000 worth of community facilities in River End	50-10(t)
River End Selected and \$200,000 worth of community facilities in River End	300-10(t)
Renovation of Present Site	200-10(t)
Northshores Selected	1000-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	100-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	100-10(t)

FINAL OUTCOMESPAYOFFS

Northshores selected and \$200,000 worth of community facilities in Northshores	100-10(t)
Minor Civil Disturbance (each occurrence)	-50
Riot (each occurrence)	-100
If game goes 25 weeks and ends with no solution	0-10(t)

***Representative and All Members of The Sivad Teachers Union

The Sivad Teachers Union is a relatively new and activist organization. Its membership is restricted to teachers, and it developed as an alternative to the administration-dominated Sivad Teachers Association. It has had as its major concern, since its beginning, the student's needs.

Much criticism has been directed against the S.T.U., because of alleged overwhelming concern for salary. But salary has been only one of a dozen issues for which the S.T.U. has fought. Recently, its efforts have been concentrated in the area of improving the student's environment. Even though the S.T.U. membership is less than 15% of the regular teaching staff (compared with the more than 90% membership in the Sivad Teachers Association), 60% of those who teach in River End belong to the Union.

The S.T.U. sees the construction of the sewage treatment plant at the River End site as one more in a long line of exploitations perpetrated against the less fortunate. Even now, there are great shortages in housing and play areas. If the River End site is selected, even less space will be available. For nearly two generations, whenever a sacrifice had to be made for the good of the community, it has been done ultimately at the expense of the River End citizens. If there is an ounce of sincerity in the pledge to provide more equal opportunities to all of the students of Sivad, the S.T.U. says "The Exploitation must Stop Now!"

This group has long since realized that the only successful politics in this system is that of confrontation; therefore recent discussions within the group have been concerned with the possibility of withholding the services of its teachers from all the schools in Sivad. Even though their members are comparatively few, the real fear is if the S.T.U. goes out, the students will follow.

To implement a "minor civil disturbance"; that is, to call for a boycott, you need 90% backing from within your group. Each week you wish there to be a boycott, whether or not it is a continuance of an already existing one, you must announce such actions to the game-overall-director.

PAYOFF TABLE

<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-500-10(t)
River End Selected and \$50,000 worth of community facilities in River End	-400-10(t)
River End Selected and \$100,000 worth of community facilities in River End	50-10(t)
River End Selected and \$200,000 worth of community facilities in River End	300-10(t)
Renovation of Present Site	300-10(t)
Northshores Selected	1000-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	100-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	100-10(t)
Minor Civil Disturbance (each occurrence)	-25
Riot (each occurrence)	-50
If game goes 25 weeks and ends with no solution	0-10(t)

****Maria Chavez, The Representative of the Sivad Teachers Union

Mrs. Maria Chavez (27) - you are an English teacher at River End High School. You have lived in the community most of your life, and returned from college with the aim of helping some of the underprivileged children in the neighborhood. You are an innovative and dedicated teacher but recently you have become frustrated over the conservatism of the local school board which has prevented you from putting into practice some of your new ideas. Over the last three years you have become increasingly angry with the city government in general, which, you believe, has made no attempt to improve your home neighborhood, and is not responsive to the desires and wants of the people. You see the proposed sewage plant as the last straw. As a result you are sympathetic to the more militant groups in the area who advocate violence as a means of getting things done. You have also become somewhat interested in the Womens' Liberation Movement, not because you feel you are being exploited, but because you feel women in general should express their opinions more widely and play a more important role in government in general.

Thus, you are violently opposed to the new sewage plant on both personal and political grounds. You have been an outspoken member of the Sivad Teachers Union since its formation. In fact,

you are a member of the union's executive board, and since the most recent problem directly affects your area, you have become the organization's public spokeswoman on this issue.

The payoff table for other members of the Sivad Teachers Union does not apply to you. Instead you receive payoffs as follows.

PAYOFF TABLE

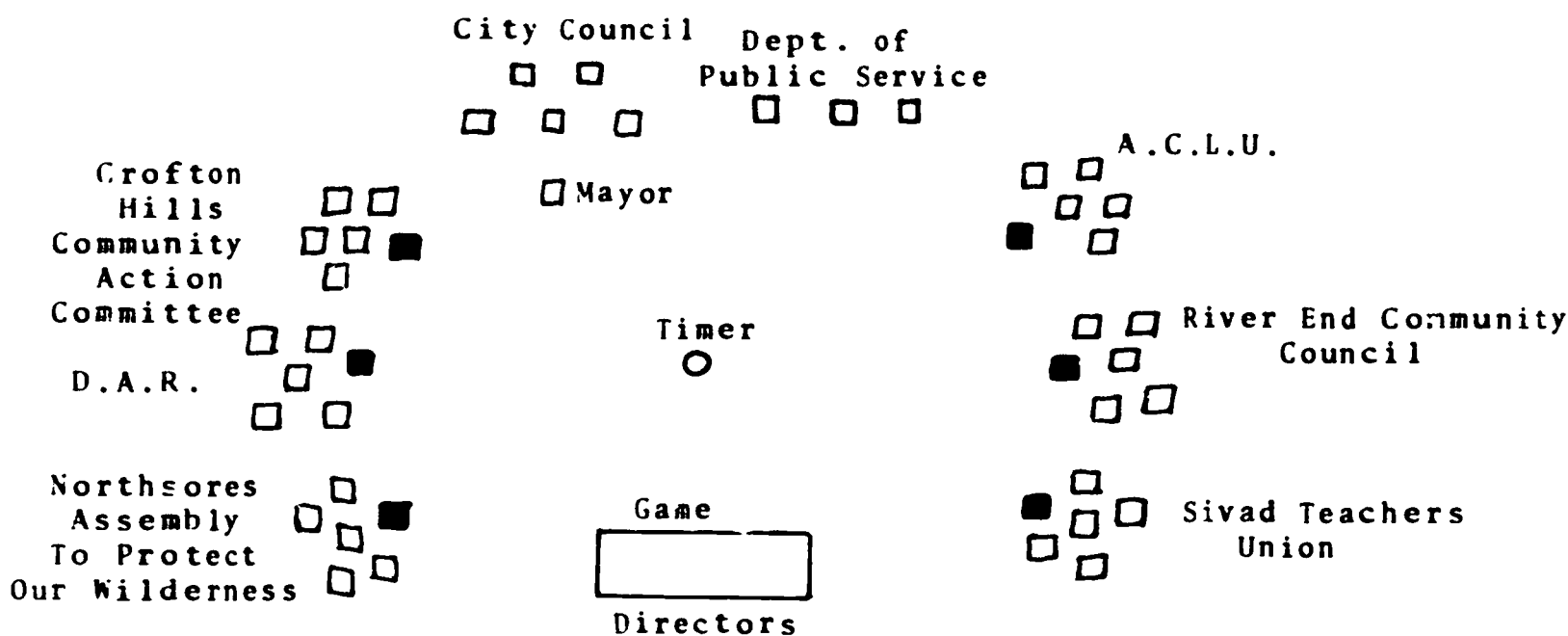
<u>FINAL OUTCOMES</u>	<u>PAYOFFS</u>
River End Selected	-600-10(t)
River End Selected and \$50,000 worth of community facilities in River End	-500-10(t)
River End Selected and \$100,000 worth of community facilities in River End	-400-10(t)
River End Selected and \$200,0000 worth of community facilities in River End	-300-10(t)
Renovation of Present Site	-100-10(t)
Northshores Selected	1500-10(t)
Northshores selected and \$50,000 worth of community facilities in Northshores	-100-10(t)
Northshores selected and \$100,000 worth of community facilities in Northshores	-100-10(t)
Northshores selected and \$200,000 worth of community facilities in Northshores	-100-10(t)
Minor Civil Disturbance (each occurrence)	150
Riot (each occurrence)	300
If game goes 25 weeks and ends with no solution	0-10(t)

III. INSTRUCTOR'S INFORMATION FOR PLAY OF THE GAME

In playing Port Sivad, the following sequence of events is recommended:

A. First Day-Towards the end of the class period assign roles and hand out relevant material to each player to be taken home and read. It is important to: 1) allow students proper time to read the material and fully digest it before play begins, and 2) to instruct them to keep their information, especially their payoff tables, hidden from other participants. It may be necessary, depending on the class level, to work through the example of payoff calculation on page 5. All players must fully understand the mechanics of their payoff tables.

B. Second Day-Arrange the class seating plan into the following order, mark the chairs of the 15 major players so each can be identified easily, and begin play.



Note: Dark Squares Indicate Representatives of the Respective Citizen Groups

FIGURE 3: CLASS SEATING PLAN

The first required action comes from the Department of Public Works; a recommendation must be made to City Council, as dictated by the "Structure of Government Decision" (Figure 2). City Council, in a meeting (public or private, at their discretion), then discusses and accepts or rejects the proposal.

The action may be slow at first. Citizen groups may adopt a "wait and see" attitude, until they feel threatened by the governmental decision-makers.

During the course of play, some innovative ideas will probably be proposed. The instructor must either transfer each of these ideas into a listed game outcome (as on any of the payoff tables), or disallow it. For instance, should a fourth possible plant site be proposed, it must be made clear that this is not feasible, for the prior twelve month study found costs to be prohibitive for all but the three listed potential sites. However, should a system of day-care centers in the River End area be proposed in order to "soften the blow" of having the sewage plant located there, the director can easily transfer this into one of the three outcomes: River End and \$50,000 of community facilities, River End and \$100,000 of community facilities, or River End and \$200,000 of community facilities. It is important to justify to the students any disallowance of their proposals, or any "re-shaping" of their ideas to fit a game-outcome mold.

A running record of game progress should be kept within sight of all players. For a typical example, see pages 46, 47 and 48.

The director could announce the end of time periods, but director participation in the game should be kept to a minimum.

Thus, a timing device, emitting a noise at the end of each "week", is recommended. Three minutes per week has been found to be a suitable length of time. With such three minute "weeks", two days (two forty-eight minute periods) has been the longest a game has taken.

We now discuss some other issues which might arise:

1. The mechanics of a public referendum. For a referendum to take place, a petition must be sponsored by a major game player and 40% of all players must sign it. This can be handled by a show of hands, or a "vote" to see whether or not a referendum will take place. If there is not sufficient interest, there can be no referendum, although sponsors can try again, each week. If there is enough support, a city-wide referendum will take place the following week. Since few players hail from areas of the city other than River End and Northshores, the throw of a die will be used to represent the rest of the populace. The die will be thrown as many times as there are players in the game; that is, with forty players, forty die-throws would be required. The table below indicates the effect of the die.

<u>If the resolution was to</u>	<u>pass the resolution</u>	<u>fail the resolution</u>
a) locate the plant in River End	1,2,3	4,5,6
b) locate the plant in Northshores	1,2,3	4,5,6
c) locate the plant at current site	1,2	4,5,6,3

For example, suppose the resolution to locate the plant in River End was passed by City Council and by the mayor, but the citizens of River End successfully sponsor a petition for a referendum. Assume thirty-five people are playing, and twenty vote to block the resolution, while fifteen vote to pass it. The die then would be rolled thirty-five times. If a 4,5, or 6 came up,

thirteen times, there would be thirty-three votes against the resolution (20+13), and thirty-seven votes to pass it (15+22). Thus, the resolution would pass, largely on the basis of the influence of the rest of the populace, i.e. those residents from areas other than Northshores or River End. Ties are broken by repeating the die throwing.

The rationale behind the low probability of passing resolution c) is twofold: first, the "rest of the city" includes people from the current site who, though unorganized, may be interested in the proceedings, and thus constitute a large bloc of voting power. Second, the expansion of facilities at the present site is an expensive alternative, which must be paid for by tax money from the entire city. Since cheaper alternatives exist, the "rest of the city" might well feel that these cheaper alternatives should be taken.

2. The "news broadcast." The Player's Background Information provides for a news broadcast at the end of each week, making public any actions, threats, announcements, etc. which had been taken during the week. This broadcast, presumably over a local television station, can also include debates between game players; interviews with city councilmen, the mayor (if he is available), or other players; or news items introducing any extraneous information into the game situation.

3. Court injunction. Four groups have sufficient financial resources to file a suit to stop implementation of the sewage plants: the A.C.L.U., D.A.R., Crofton Hills Community Action Committee, and Northshores Assembly to Protect our Wilderness.

For any of the Northshores groups to carry out this action, \$2000 per week must be paid as court, lawyer, and related costs. For the A.C.L.U. to file suit, backing of the River End Community Council must be obtained, and if proceedings take more than five weeks, the case must be dropped for lack of funds.

Once an injunction has been filed, a die is thrown for that week and each week thereafter until a decision has been reached or the case is dropped. If a 1,2,3,4 or 5 comes up there is no decision and play proceeds to the next week. If a 6 comes up, the die must be thrown again for a verdict. A 1 or 2 on that throw will indicate that the suit was won by the party filing the injunction; a 3,4,5 or 6 will indicate failure.

4. Game conclusion. When a proposal is passed by the Mayor, the required governmental actions have been completed. This does not mean that the issue is settled, however. Following the completion is a two-week "lull" period, before implementation, during which citizens can initiate a referendum or file an injunction. Usually, a referendum will be attempted, and if it fails, an injunction may follow. There must be time allotted for these actions. Thus, the game continues until either: 1) twenty-five weeks have been played; 2) The governmental decision process is complete and two extra weeks have been allowed for a referendum and/or injunction. The number of weeks played is used for payoff calculations with one exception: the two weeks allotted for injunctions or referendum, if not resulting in either action, are subtracted from the total weeks of play.

5. Winners and losers. At the game's end, anyone with a

positive payoff total is a winner, and those with negative totals, losers. For individuals, a very rough indication is 0-100, good; 100-300, excellent; more than 300, outstanding; -200 to 0, a minor loser; and less than -200, a major loser. For the group as a whole, performance can be measured by calculating the proportion of people who obtained a positive score. If this is more than 75%, they probably have played excellently; 60-75%, good; 50-60%, fair; less than 50%, poor.

6. Discussion. If time permits, each major game participant may give a verbal account of his actions, illustrating his private goals and motivations, what he did to achieve these goals, and whether he feels he has been successful. Following each presentation the group can vote to indicate their impression of his performance. This provides an optional mode of evaluation.

C. The Third Day, or part of it, can be used to illustrate noteworthy points by means of a class discussion. Some of these might be:

1. The effect of citizen organization upon the governmental decision making process. Contrasts between the organized River End and Northshores areas and the unorganized area near the present site can be brought out and illustrated by the record of game play. In addition to overt action, organized areas oftentimes are perceived as a threat by governmental decision makers, and thus can influence the process indirectly.

2. The influence of money power upon politics. The question of campaign spending and the soaring costs of political campaigns are illustrated by the role of City Councilman Ronald Pearson.

Also, the payoffs for City Councilmen and the Mayor were intended to reflect the balance of power in urban politics. Northshores, the area with the money, is also the area with most power. It is extremely unlikely that the sewage treatment plant would ever be located there.

3. Civil disobedience as an instrument of power. A discussion can focus upon the actions of members of the River End Community Council. They have very little power when compared to the Northshores people, and power they do have only can be exercised through a referendum, through the A.C.L.U., or through civil disobedience. In reality, poor people often are not aware of either the A.C.L.U. or the procedures necessary for initiating a referendum. Thus, civil disobedience is a logical outcome—either a coordinated and planned action, or simply due to frustration. Another point to be made is the success of civil disturbances. Urban riots on a large scale helped speed up civil rights legislation. Freedom riders helped effect changes in bigoted and racist laws by bringing widespread national attention to bear on issues. The anti-war movement in the United States has, through many instances of civil disorder, changed the foreign policy of this country. Of course, legal protest also has had an effect, but the importance of civil disobedience cannot be overlooked.

4. Equality of facility allocation. One of the major reasons for the construction and implementation of this game was to illustrate the ideas of Wolpert (Austin, Smith and Wolpert, 1970, and Wolpert 1970) and Harvey (forthcoming) that there should

be some spatial equality of urban public facilities. Historically, the poor and depressed urban areas have become the receptacle for most of the noxious public facilities -- freeways and unwanted urban renewal which force mass relocation and break up neighborhood and social ties, incinerators, junkyards, and garbage dumps. At the same time, however, these areas do not have even their proportionate share of parks, playgrounds, police and fire protection, educational facilities, and sanitation services. As in the real world it is expected that most games will end in a River End solution. However, the notion of compensation for the areas holding the noxious facility is also introduced. This is accomplished by side-payments of desired facilities. This disparity between the game and the real world can provide the basis for interesting discussion.

IV. COMMENTARY ON A REPRESENTATIVE PLAY OF PORT SIVAD

Port Sivad has been played several times and the following is a detailed description of one representative play in which forty-five members of an introductory economic geography class participated.

<u>Week Number</u>	<u>Actions Taken</u>
1.	No action
2.	a. Mayor makes public statement that a fertilizer plant should be attached to the sewage plant with profits being "earmarked" for the enrichment of the poor area. b. Representative on City Council for River End requests that the Dept. of Public Works make its recommendation as soon as possible.
3.	a. Dept. of Public Works recommends renovation of the existing sewage plant.
4.	a. Proposal is discussed in a closed City Council meeting--no decision reached.
5.	a. Council continues debate--still no decision reached.
6.	a. City Council accepts the proposal of the Dept. of Public Works by a 4-1 vote.
7.	a. An open letter from the Dept. of Public Works is published giving reasons behind the recommendation, and asking for city-wide support of renovation of existing facilities.
8.	a. Rumor is spread that unrest is developing in River End because of the expense of the present recommendation. b. Television time is made available for a public debate between a councilman and a citizen of River End.
9.	a. A rumor is circulated about the mayor's

- private life which may affect his decision in the matter of present concern.
- b. Mayor accepts the recommendations from City Council.
10.
 - a. Sufficient signatures collected to force a public referendum on the sewage issue.
 - b. The recommendation for renovating the existing facilities fails in the ensuing referendum. Issue goes back to City Council.
 11.
 - a. River End councilman makes a Television speech calling for citizens to lobby their representatives and make their wishes known.
 - b. The representative of the D.A.R. makes a public statement calling for the location of a new plant in River End, suggesting that parks also be constructed in the poor neighborhood.
 12.
 - a. Still no action by City Council.
 - b. Public statement by the Head of Dept. of Public Works that the present facilities are being severely strained and that action should be taken immediately on a new plant.
 - 13.*
 - a. Statement by Rev. Shaw that River End will accept the new sewage plant only if five million dollars is given to the community for its own development.
 - b. City Council makes a proposal that River End receive the new plant plus \$200,000 of public funds for community development.
 14.
 - a. The mayor accepts the new proposal.
 15.
 - a. Sufficient signatures are collected to call for a second referendum.

*Sometime near the thirteenth week, Ronald Pearson collected a campaign fund contribution of: \$50,000 from the D.A.R. Unlike the actions listed, this was clandestine and not revealed until the end of the game when payoffs were calculated.

- b. The referendum ends in deadlock, with an evenly divided vote.
- 16.
 - a. The deadlock is broken by a "recount" of the ballots, and the new proposal passes. (The official end of the game--i.e. the number of weeks to be used for calculating payoffs.)
- 17.
 - a. Riot ensues in River End led by the Sivad Teachers' Union and the River End Community Council.
- 18.
 - a. No action taken.

Summary. After three weeks of discussion and public statements, the Department of Public Works recommended the most expensive option--that the present sewage facilities be renovated. City Council took another three weeks to debate the proposal, during which time the citizen groups were actively discussing how this course of action would affect their areas. Despite a plea for support from the public works department, passage of the initial proposal through City Council and acceptance by the mayor, the inner city citizen groups were opposed to this plan. Hoping to pressure for the Northshores location and annoyed by the considerable cost of renovation of existing sewage facilities, they organized a referendum and defeated the proposal. As a result the issue returned to City Council for further debate. During the second council meeting, representatives from both suburban and inner city communities attempted to pressure government officials to keep the facility outside their areas. However, after three weeks it was proposed that the River End site should be used while the surrounding area should be allocated \$200,000 of public money for community development. This proposal was accepted by the mayor. A second referendum, again organized by the poor community, failed

to block the new decision and a full scale riot ensued.

Thus, since there was neither an injunction nor referendum during the last two weeks, the official length of the game was sixteen weeks. The River End area was selected for the location of the new plant and \$200,000 was offered to the community for local development. However, the final outcome was one of frustration and anger in the River End neighborhood. This outcome yielded the following payoffs.

		Winners	Losers
Mayor Knight	$300-16(10)-200 = -60$		-
Ronald Pearson	$400-16(10)-100 = 140$	+	
Ruth Simpson	$480-16(20)-100 = 60$	+	
Gregory Duval	$300-16(10)-40 = 100$	+	
George Shipley	$-100+500 = 400$	+	
Charles Bradshaw	$200-16(10)-100 = -60$		-
Randolph Bacon	$145-16(5)-25 = 95$	+	
Paul Wright	$-465+20(16)-25 = -170$		-
Ed Norton	$370-16(20)-25 = 25$	+	
Red Baron	$300-16(10)-25 = 115$	+	
Priscilla Wellington	$300-16(10)-150-200 = -210$		-
Roger Brown	$-100-16(10)-25 = -285$		-
Peter Ashton	$250-100 = 150$	+	
Rev. Shaw	$300-16(10)-100 = 40$	+	
Maria Chavez	$-300-16(10)+300 = -160$		-
Northsores Assembly	$300-16(10)-25 = 115$	+	
D.A.R.	$300-16(10)-150-200 = -210$		-
Crofton Hills C.A.C.	$-100-16(10)-25 = -285$		-
A.C.L.U.	$250-100 = 150$	+	
River End Community Council	$200-16(10)-75 = -35$		-
Sivad Teachers Union	$300-16(10)-50 = 90$	+	
		12	9

Assessment: It is useful to review this particular play of the game in light of the objectives established when the game was designed.

1. Insight into the structure of urban government decision making with particular reference to locating a noxious public facility. Certain points were clearly revealed in the game apart from the general decision process which was outlined in information packages assigned to players.

- a. The public officials were initially very cautious, taking several weeks to come to a decision, and then opting for the compromise proposal. They apparently were willing to accept the most expensive action in order to avoid any conflict with organized citizen groups. They believed, possibly, that in the long run conflict with affected citizens might prove more costly than renovation of the existing site. It is significant that the game did not allow for strong representation of the neighborhood surrounding the existing plant. The councilman from the area provided one dissenting vote, but without any other resources he was initially unable to block the proposal.
- b. That the compromise solution was defeated by a public referendum reflected the payoff structure of the game, but early strategies of citizen groups also contributed. For example, one reason the issue failed was the considerable discussion about the extra cost

involved in renovation. Also, both inner city and suburban groups were hoping to force the location to one or the other of the new locations, since this would yield greater payoffs.

2. Impact of citizen action on the governmental decision process.

- a. The effect of a public referendum was revealed. Play indicated that in some cases citizens can block a government decision, in effect exercising a veto power.
- b. The ultimate outcome demonstrated that success was easier for groups with money resources and strong political representation. The latter resource was reflected in the payoffs of a majority of the City Council members who gained more points from a River End rather than a Northshores location. In this respect the structure and outcome of the game is considered realistic.
- c. The groups whose only resource was threat of civil disobedience used this option but found that it resulted in little success. The River End community rioted to show their displeasure of the government decision, but were unable to block implementation. However, they were able to induce the government to "buy them off" with \$200,000 worth of public funds for community development. This outcome is also considered realistic in view of the recent

accounts of location in conflict situations and recent developments in location theory incorporating ideas of side-payments (Wolpert, 1970).

3. The complexities and structure of the game proved well suited to an introductory college class. At the beginning, some players were a little confused, but within two or three time intervals they were formulating strategies, became increasingly active and motivated, and debate became heated. Further, towards the end of the game the "losers" became increasingly frustrated at their inability to redirect the course of the proceedings. They had become deeply involved in the game situation.

4. Attention focused on the pollution issue, which supports the contention that game interest is stimulated by incorporating an issue of present concern. For instance on the second day some players circulated photographs of polluted water attempting to press their vested interest.

5. The flexible structure of the game, with relatively few rules and mandatory actions, allows students to give free rein to their imagination and inventiveness. However, this also requires quick and precise action on the part of the game director to forestall any unnecessary deadlocks and to adjudicate whether an action is feasible or permissible. One structural element which does seem necessary is strict adherence to the timing mechanism. Although this means calling the class to order every three minutes, frequently cutting off lively and interesting debate, imposition of the constraint is critical in order to keep action moving and to impress that time is an important element in locational decisions in the real world.

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