

MFM Project

REVIEW OF ECONOMIC PLANNING, INFORMATION SYSTEMS AND RELATED ISSUES FOR THE CITY OF VLADIVOSTOK

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January, 1995

January 27, 1995

Mr. Sam Leaman
Research Triangle Institute
3040 Cornwallis Road, Box 12194
Research Triangle Park, NC 27709

Dear Mr. Leaman:

Enclosed is our final report entitled "Review of Economic Planning, Information Systems and Related Issues for the City Of Vladivostok". It contains a variety of recommendations classified as follows: Economic Planning Department, Information Systems, Capital Improvements, Staff Training and Other Financial Issues.

The report concludes that there are serious problems facing the City that call for attention and action. We point out a course of action which we believe will address some of these problems and go a long way toward correcting them.

We also believe there is a real opportunity for the leaders of Vladivostok to shape the City's future in the right direction. We hope this report will, in some significant way, contribute toward this goal.

Mr. James Alloway, in a review of a draft of this report, indicated that due to budget constraints, his highest priorities are in the areas of capital improvements, information systems and staff training. Of the fifty-five recommendations in the report, about two-thirds address these three areas.

We extend special thanks to both Mr. & Mrs. Alloway for their assistance and hospitality. They helped to make our visit pleasant and memorable.

We appreciate the opportunity provided by RTI to be a part of the MFM project. Please contact us should you have any questions or comments about the report. If you have a need for further assistance, we would be happy to participate.

Sincerely,



Michael J. Daun



James A. McCann

c: James Alloway
Heather Jackowski

***Review of Economic Planning, Information Systems
and Related Issues For The
City of Vladivostok***

1. Introduction

The authors of this report were engaged by Research Triangle Institute (RTI) to overview the mission, organization, functions and operations of the Economic Planning Department (EPD) of the city of Vladivostok. Also to be included was a review of Capital Planning and Budgeting, the Information Systems Department (ISD) and a look at major regulations that impact the effectiveness of the EPD.

This report addresses the above and also discusses information flows to and from the EPD as well as computer hardware and software used by the department. The report comments on training needs and includes selected observations we believe are important to the City of Vladivostok as a whole, where such observations are deemed relevant to the EPD mission.

In addition to the EPD Director and her top assistant, the authors interviewed the Director of the recently formed ISD, the Director of the Krai Statistical Committee and the Director of Information Systems for the Krai Tax Inspection Department. The RTI resident manager, Mr. Alloway, his systems staff person, (Sasha) and the RTI financial consultant, Mr. Reddy, all provided significant assistance. Our interpreter, (Helen) was highly proficient and made the staff interviews easy to conduct and productive. For a full list of the interviewees, see Exhibit 1.

There were a number of factors limiting the study. The most obvious was time. Beginning on the 8th of December and leaving the morning of the 15th left seven days on site. Because of the weekend and a Russian holiday, only four days were available for staff interviews, with the weekend and holiday being used for meetings with the resident director and the financial consultant.

Another limitation was the necessity to rely totally on information provided by scheduled interviewees and background RTI reports. The authors had little opportunity to corroborate or otherwise test the validity of either source. Therefore, the authors' conclusions and recommendations are dependent upon these limited information sources and should be considered in this context.

The authors also did not have the opportunity to interview either the Mayor of Vladivostok or his First Deputy in charge of the Department of Economic Planning and Information Systems. This proved to be significant in that the authors had no first hand understanding for what areas and directions the current City leadership would be most interested in pursuing.

Finally, in the limited time available the authors were generally unable to acquire documentation to support the authority, responsibilities and practices being described. For example, in spite of repeated attempts, the authors were unable to acquire a copy

of the City Budget or the authoritative rules surrounding budget preparation and reporting practices.

The authors did receive excellent cooperation from the EPD Director and her top assistant who were very open and candid in their comments. The Director of EPD also provided copies of key reports produced in her Department. However, these reports are written in Russian and there was no opportunity to have them translated to English.

Following this introduction, the report is divided into three sections. There is an Executive Summary which highlights major findings, conclusions and recommendations. Next, the report describes "Current Practices and Status", e.g., existing organization, functions, policies, etc. of the EPD. The final section of the report provides study conclusions and recommendations.

II. Executive Summary

The engagement called for an overview of the Economic Planning Department and of the information systems in the city of Vladivostok which would result in recommendations for better performance in both areas. The authors arrived in Vladivostok on December 7, 1994 and departed on December 15.

The "Introduction" section points out some of the restrictions encountered and some of the factors which limited the ability to make a more thorough study. The short time period, the lack of access to any written documentation and the inability to interview top local officials were the primary limiting factors.

The report, as shown in the "Table of Contents" is divided into six major sections: Introduction, Executive Summary, Current Practices and Status, Conclusions/Recommendations, Final Comments and List of Exhibits. The major divisions within each section are identified by Capital letters and the major recommendations are numbered.

Only highlights of the report are included here. Following this Executive Summary is a more complete explanation of the details involved in arriving at the various conclusions and recommendations. Here are the key items, broken down by major section:

Current Practices and Status-Section III

A. GENERAL OBSERVATIONS

The City's infrastructure is in a deteriorated condition and there is pervasive conflict among the various levels of government. There was no evidence available of laws or regulations which clearly define lines of authority among City departments or among the various government entities.

B. MISSION ORGANIZATION AND RESPONSIBILITIES OF THE EPD

The EPD has four divisions and a staff of fifteen. The Director's office oversees activities of the entire department and develops small business support requested by the Mayor. The four divisions perform various operational functions, including preparation of capital budgets, construction monitoring, gathering information about tariffs for certain products and establishes price controls on a variety of consumer products.

The EPD also performs many of the activities normally associated with an economic development department. It prepares targeted business assistance efforts, develops developer feasibility studies and makes analyses for the Mayor about proposed

projects. EPD also prepares a long-term development plan and reports economic activity to the Mayor.

C. CAPITAL IMPROVEMENT PLANNING AND BUDGETING

The EPD prepares a form of both an annual and multi-year capital budget. The process used reflects a basic attempt to determine capital budget needs but it fails to be an effective tool in setting budget priorities. There were no written guidelines for conducting condition assessments, replacement schedules or for establishing criteria to meet the real capital needs.

The level of infrastructure construction has declined substantially during the past five years. The proposed 1995 construction for schools, police stations and housing is one-third to one-half less than it was in 1990. Although the city's multi-year development program extends through the year 2005, much of the program is, according to the EPD director, a pure "wish list" with limited expectation of actual construction.

D. REGULATIONS AND THEIR IMPACT

There were virtually no written laws, regulations or prescribed procedures found describing the legal authority or the duties of the Krai, the City or the Raions or of the departments and agencies of the City. Neither did we find any written personnel policies or procurement regulations. In view of the above, it was impossible to assess the impact of current regulations for the most part on these local government entities.

The EPD did cite some federal programs/guidelines which have been helpful. The Small Business Support program supplies guidelines and consulting services. Reports which compare industry salaries for different areas, and the registry of small businesses have helped.

The EPD director found the biggest regulatory obstacle to be the high rates of taxation. It discourages small businesses from forming or relocating, pushes existing businesses to hide true production figures, encourages the "no tax" cash economy and makes projections of future revenues unreliable. She believes only about 30% of the taxes are collected.

A second major obstacle mentioned was the frequent decrees coming from Moscow which are often inconsistent or incomplete. For example, a federal decree exempted a certain business class from production taxation, but there was no follow-up regulation which would allow implementation.

E. INFORMATION SYSTEMS AND ECONOMIC PLANNING

The EPD data processing resources are limited to four stand-alone microcomputers and three printers, all of which are functional, but outdated. In many cases, the EPD acts as an "information middleman", collecting information from one source, then analyzing and reformatting it for the mayor. The department is highly dependent on the City Finance Department as well as the Krai Statistical and Tax Inspection departments for information it needs. There are opportunities to reduce the manual effort now needed through organized data sharing and transfer among these agencies.

In an attempt to assist the EPD and select other city departments, the Information Systems Department (ISD) was recently created. It is staffed by four professionals, and serves only departments in the "grey building" which do not have their own staff. This somewhat arbitrary limitation of the customers base, severely limits what ISD can contribute to the City in terms of data processing resources.

The ISD has limited itself mainly to stand-alone microcomputer applications. Its responsibilities have not involved any major transaction processing systems such as purchasing, general accounting, or payroll. No information system plan currently exists, but the ISD Director believes the resources now available are far too short for the demand.

A three-phase \$750,000 local area network (LAN) is planned, with the first phase being installed during the first quarter of 1995. Initially, 15 computers will be connected to a single server. The second phase involves expanding the City LANS to 45 computer work stations and installing five additional LANS, one in each of the Raions. The third and final phase calls for the design and installation of a city-wide financial accounting and reporting system using a vendor software package on the city network.

F. STAFF CAPABILITIES FOR ECONOMIC PLANNING AND INFORMATION SYSTEMS

The EPD leaders expressed interest and need for learning about government-business partnerships. It would also be desirable for those leaders to learn about methods of project financing. The four staff in ISD possess a university education and are familiar with major microcomputer software. However neither the Director nor his staff have any LAN experience or experience with large transaction processing or financial reporting software.

Conclusions and Recommendations-Section IV

There were several different sources used by the authors as foundation for what follows. The RTI reports, interviews with various officials in Vladivostok, in addition to meetings with the RTI resident director and consultants all served as useful

background. The extensive experience of both authors in private consulting and as top finance officials in a large city, similar in size and climate to Vladivostok, was also a key factor used in arriving at the recommendations. The major recommendations, are divided into sub-sections and appear in numerical order within each subsection. A detailed explanation as to why the recommendation is being made and steps to be taken in implementation appear in the full report. The major recommendations follow:

A. ECONOMIC PLANNING DEPARTMENT

1. *Clarify and expand the mission of the current EPD as the focal point for the City's Economic Development effort.*
2. *Change the official title of the EPD to the Economic Development and Marketing Department. (EDMD)*
3. *Consolidate the economic development related functions currently performed in other City departments/committees into the new Economic Development and Marketing Department (EDMD).*
4. *Transfer certain routine administrative functions out of the new EDMD to other departments.*
5. *Establish a Convention & Tourism Division.*
6. *Develop a strategic plan for attracting and retaining desirable industry/business.*
7. *Analyze the city's public utilities and other major enterprise groups (water, sewer, port, airport, electric, transit, etc.) to come up with a plan to eliminate or reduce the large subsidies now required.*
8. *Establish a Vladivostok Economic Development Corporation*
9. *Develop a land use plan and a zoning ordinance that provides authority for enforcing the plan.*
10. *Develop a marketing plan for the City.*
11. *Begin a multi-year surveying effort aimed at establishing legal property boundaries throughout the City.*
12. *Establish Mayoral decrees or other formal mechanisms for implementing the above recommendations.*

B. Information Systems Projects and the Information Services Division

1. *Acquire a full time Project Manager.*
2. *Establish a Project Scope and Objectives Statement.*
3. *Create a Users' Group and establish a Project Team.*

4. *Prepare a Project Work Program/Schedule.*
5. *Develop a System Functions & Features Statement.*
6. *Inventory current data needs and develop a proposed data model.*
7. *Monitor and report project progress and status on a continuous basis.*
8. *Define duties of the project director.*
9. *Determine the interface requirements of Other City systems/business processes.*
10. *Design user custom reports and screens.*
11. *Design the new consolidated database structures.*
12. *Develop new procedures to accommodate the new reports and controls.*
13. *Create the new databases, parameter tables.*
14. *Compile and test all custom programs.*
15. *Train trainers/users.*
16. *Perform system test and require formal city acceptance of new financial system.*
17. *Set network standards.*
18. *Manage networks.*
19. *Set up database administrator.*
20. *Guide project management.*
21. *Monitor systems (Auditor role).*

C. Capital Improvements

1. *Create a Capital Improvements Committee (CIC) to set priorities and adopt a multi-year capital improvements program and annual capital budget.*
2. *Establish a set of Citywide criteria which can be used to establish priorities among projects.*
3. *Inventory the current status of infrastructure records. Devise a timeline for developing and maintaining an up-to-date, automated infrastructure facility database.*
4. *Begin to develop physical condition ratings for those infrastructure facilities most in need of attention.*
5. *Consolidate the separate capital plans for City, Krai and privately financed capital improvements into a Unified Capital Improvements Plan.*

6. *Retain a 10-15 percent budgeted contingency which can be applied to projects as needed to assure completion.*

D. Staff Training

1. *Tour two to four major US cities which have developed effective city development and marketing programs. Investigate the major programs, interview key elected and development officials and investment bankers.*
2. *Include capital improvement planning and budgeting techniques as part of the multi-city tour.*
3. *Train appropriate staff of the Economic Planning Department in selected forecasting software.*
4. *Train appropriate staff of the Economic Planning Department in the use of the Urban Land Institute's Development Impact Software.*
5. *Learn the City's current microcomputer operating system(s).*
6. *Obtain training in the management and support of the soon to be installed City networks for a least two ISD staff persons.*
7. *Train all ISD staff and selected City department users in the use of the chosen network database software.*
8. *Train all ISD staff and selected City department users in the use of report generator software if such software is acquired by the City.*
9. *Train at least one ISD staff person, one or more in the finance department and other selected user departments in the reporting capabilities of the proposed Accounting & Financial System software prior to the installation of the software.*
10. *Train at least two ISD staff (or Finance Department analysts) in the maintenance and support responsibilities of the Accounting and Financial System software.*

E. Other Financial Issues

1. *Inventory and document current City budgeting, accounting and financial reporting practices. Bring accounting and financial reporting practices into conformance with Generally Accepted Accounting Principles (GAAP). Prepare a Budgeting & Accounting Policy & Procedures Manual. Mandate these standards Citywide by Mayoral decree.*
2. *Establish standards and procedures for hiring and promotion of employees and for the procurement of goods and services by the City. A mayoral decree should follow.*

3. *Defer issuing municipal bonds until the City has achieved a balanced budget and can demonstrate its fiscal responsibility to bondholders/bond rating agencies. The City should not borrow as a way to balance its budget.*
4. *Examine each of the 19 local taxes currently permitted for the purpose of increasing local revenue.*
5. *Hire an experienced financial auditor(s). In co-operation with the Krai and federal governments, the first audit should be a thorough financial compliance and controls audit of tax collections.*
6. *Consider establishing a permanent City Audit Division reporting to an independent board.*
7. *Strengthen ties with the federal government to encourage fair consideration of the city of Vladivostok's fiscal needs. Establish a permanent federal liaison officer who reports to the Mayor.*

Final Comments - Section V

The fifty-five recommendations listed above relate primarily to the Economic Planning and Information Systems activities. Other recommendations include staff training, capital planning, and some related financial matters. The authors of the report believe each is deserving of attention and a serious look at implementation. A draft of the report was reviewed by Mr. Alloway, the RTI resident manager in Vladivostok. He made some suggestions regarding the Information Systems which are incorporated into the report.

Mr. Alloway also indicated that, from a budgetary standpoint, his highest priorities were in capital improvements planning, information systems development and staff training. These subjects are addressed in our assessment of current practices in Section III - C, E and F, and in the conclusions and recommendations Section IV - B, C and D.

The authors appreciate the opportunity offered by RTI to participate in the MFM project. We wish you success and extend our offer to assist in whatever way possible to make it happen. If there are questions or comments about the report, please contact us.

III. Current Practices and Status

A. GENERAL OBSERVATIONS

To an outside observer, the Vladivostok infrastructure basic to quality of life for residents and business alike is in acute disrepair. The water distribution system is in poor condition. A large portion of the City's port facility remains idle and ill equipped. Electricity for street lights is routinely unavailable. Many sidewalks and streets are crumbling and unsafe. According to the Director of Economic Planning, public buildings remain unfinished for over two years. The City's airport is far from ready to efficiently handle the commercial air traffic normal for a city of its size. The mass transit system moving stock is largely beyond its normal useful life and may pose a safety hazard to its riders. Housing, mostly owned and operated by the City, is generally viewed as insufficient in number and inadequately maintained. While life goes on, the poor condition of these vital facilities poses the central challenge facing Vladivostok over the next 10 - 20 years.

Made worse by the high national inflation rate, current City revenue sources and the supporting revenue collection system are not likely to be sufficient to finance City government services, even at the bare necessity level. As a result, the City government has been forced into a severe cutback mode even as obvious government service deficits (water, electricity, housing, etc.) worsen.

Long term (10 - 20 year) leases of government property are permitted. However, there is reported to be little, if any significant private property ownership of either land or improvements in Vladivostok. While such leases do permit private enterprise activity on government land, the lack of private ownership by title no doubt discourages privately financed development.

"Conflict is pervasive among the district, City and regional governments of Vladivostok".¹ This "pervasive conflict" was also noted during the authors' interviews with City and Krai government staff. Personnel disagreements aside, confusion may contribute to such conflict due to the lack of clear lines of authority/responsibility.

The proper assignment of authority among City departments, and among local governments including the City could not be discerned through any formal documentation (laws, regulations, etc.) made available to the authors of this report. Any meaningful negotiation requires a clear understanding of the responsibility and authority of the negotiating parties. However, the authors were generally unable to acquire the basis for such authority. Without such written authority, unproductive

¹ Comments by Juliet Johnson RTI, report titled Vladivostok Design and Start-Up Trip, January of 1994.

conflict is likely to occur among individuals in City government, among City departments and among the City, Krai and Raion governments.

B. MISSION, ORGANIZATION AND RESPONSIBILITIES OF THE ECONOMIC PLANNING DEPARTMENT

The Economic Planning Department (EPD) consists of a 15 person staff, organized into four divisions including the Economic Planning Director's Office. The EPD has both line (operational) and staff (analysis and reporting) functions.

The Director's Office includes herself, two assistants and a programmer. This office oversees activities of the entire Department and also develops targeted small business support programs requested by the Mayor using available tax and economic activity data.

The Economic Analysis and Projections Division provides a proposed annual capital budget and a multi-year capital development program to the Mayor. Other responsibilities include construction monitoring and preparation of quarterly economic activity reports to the Mayor.

The Contracts and Investing Division reviews developer prepared feasibility studies for proposed development to determine whether the City will subsidize the project. It also performs certain construction contract monitoring functions.

The Prices Division collects and reports information necessary to establish tariffs on certain targeted products. This division also establishes price controls for a variety of products subject to these controls. Unit price information on various consumer goods is likewise developed by this division to help develop/modify the "Poor Peoples Support Program" for low income residents.

As part of a recent cutback, the Mayor eliminated the three person Market & Services Development Division. One person from this division then retired while the other two persons and their responsibilities were shifted to other divisions of the EPD.

In certain of its operational responsibilities, the EPD resembles a U.S. city development department. The EPD prepares targeted business assistance efforts. It evaluates developer feasibility studies and recommends project support/opposition to the Mayor. Once underway, EPD monitors the progress of construction. EPD also prepares a long term development program for the City and reports economic activity to the Mayor.

There are other typical city development functions that do not exist in the EPD - if at all in City government. A former EPD organization unit focusing on improving tourism has been eliminated. Certain important marketing functions (City port and airport, for

example) occur without the input of EPD. There was also no mention of EPD establishing or enforcing any zoning ordinances or specific land use guidelines to promote compatible development.

The staff role of the EPD centers on the provision of financial and economic reports to the Mayor. These needs will be discussed further in the Information Systems section of this report. Opportunities do exist in this department for the saving of staff time if data from sources available outside the department can be accessed electronically.

The City is contemplating the issuance of bonds to help finance infrastructure replacement. There has been discussion within the City regarding whether the Department of Finance or the EPD should administer such a bond issue.

C. CAPITAL IMPROVEMENT PLANNING AND BUDGETING

Currently the EPD has developed a form of both an annual capital budget and multi-year capital plan. The annual capital budget is prepared as a proposed list of projects known as the "Investment Intentions" report. The EPD requests all City departments to provide their project need requests for municipal operations including water/sewerage systems, schools, electricity, social-cultural program improvements, etc.

Each submitting City department proposes projects according to what the department believes is most needed. Wherever possible EPD uses an Annual Technical and Economic Survey which, when applied against minimum service ratios (children per class, housing sq. ft. per person, etc.), leads to a set of project priorities in each Raion. The Mayor also establishes high priority categories (ex: military/poor housing, water systems). The prioritized Investment Intentions report listing all City financed projects is then submitted for review to the Mayor and each Raion.

Although the above process reflects a basic attempt to determine capital budget needs, it falls far short of an effective system of priority setting. For example we found no written guidelines for conducting condition assessments, replacement schedules or other basic measures to objectively determine real capital improvement needs and to establish the criteria for meeting those needs.

Requests are also made to the EPD by businesses for assistance. Requests usually involve free or subsidized land provided by the City in exchange for a commitment by the applicant to build and operate a privately owned business. However, the authors could identify no clear criteria or standards on which such decisions were based. Certain private leases are provided with no time limits for housing development. A separate Investment Intentions schedule of these projects is provided to the Mayor. A

third schedule of improvements is developed by the Krai for state funded projects - public buildings, economic development, etc.

Trends In Infrastructure Construction

Over the past few years, the level of infrastructure construction activity has declined substantially. This is in large part due to the lack of funding for these projects. Following are examples of construction decline in building construction activity.²

	<u>1990</u>	<u>1995</u>
Schools	2 - 3	1 - 2
Police Stations	2 - 3	1
Housing	300,000 sq. meters	100,000 sq. meters

Following Mayoral and Raion review, the City financed Investment Intention Plan is reduced substantially. In 1995, for example, the requests will total about 186.3 billion rubles (\$55.6 million U.S.) while the approved projects will total 100 billion rubles (\$29.9 million U.S.) - a 46 percent reduction.

The EPD also commented on the fact that the City had begun construction on numerous building projects only to place 18 - 20 of these projects "on hold" for over two years due to inadequate financing. The apparent focus on military needs for many years has led to this domestic infrastructure deficit, she added.

In commenting further on the level of infrastructure spending, the EPD Director stated "What is adequate? We must fund what is realistic." Clearly, the scope of the infrastructure deficit is beyond any achievable plan now in place to eliminate or substantially reduce.

The authors were advised by the EPD Director that most of the City's infrastructure records (streets, sewers, school buildings, etc.) are to be found in the department responsible for operating these services. However, the authors were unable to examine the accuracy or completeness of these records.

The City is in a no win position regarding infrastructure. Federal funds for this purpose are severely cut back. The City attempts to respond to urgent demands for new housing even as existing water and sewer facilities are failing. It commits to projects only to see projects stop before completion due to the lack of funds.

Source: Interview with the Director of the Economic Planning Department.

A multi-year Development Program for the City extends through the year 2005. However, much of this program is a pure "wish list", according to the EPD Director, with limited expectation of actual construction. A local tax was proposed to increase City funds dedicated to infrastructure but it was defeated.

D. REGULATIONS AND THEIR IMPACT

As mentioned earlier, there were virtually no written federal or local laws, prescribed procedures, rules or practices made available prior to, during or after this review. Nor did we find any documents which spelled out the legal authority or duties of the Krai, the City or Raions. This was also true of the authority/responsibilities of the City Departments. Practically speaking, this constraint makes any assessment of current regulations impossible.

It is difficult indeed to offer sound recommendations for organizational change without the legal basis for the current organization. It will be more difficult still to bring differing City or other government entities together in consensus for major organizational change or reform in current practices without a clear understanding of the current system of authority/responsibility. Furthermore, efforts to establish sound budgetary controls (encumbrance controls, rules surrounding budgetary transfers, etc.) will be made much more difficult without a clear, written definitions of existing authority regarding spending authority and control.

Likewise, the authors could uncover no statement of personnel policies or the authority to establish such policies. Without an adequate personnel and compensation system, effective training programs will be difficult to implement. Moreover, during interviews, statements were made about the poor morale and problems retaining talented staff. One outgrowth of inadequate personnel and compensation practices is training staff only to see them take jobs elsewhere.

Finally, the authors could not determine what if any procurement practices are being used and what legal authority exists to support those practices. Like personnel, purchasing is a major component of expenditures and an area open for abuse.

The EPD Director did cite a number of Federal programs/guidelines as well as local initiatives which have been helpful. Mentioned were the following:

1. Recommendations on Social/Economic Development by the Federal Economic Ministry - a document which provides useful information on industry salaries, city-to-Moscow comparisons and helps establish target industries for development.

2. Federal Program of Small Business Support -provides guidelines for small business assistance projects including consulting assistance to small business and the creation of special training centers.
3. Local Center for Small Business is being developed/planned -exhibit of available small business programs, creation of small business associations for each major type of business (example: Association of Construction Contractors).
4. Current registration of all small businesses with Krai Tax Inspection Department is essential not only for tax collection but for City economic development database.

The EPD Director sees the biggest regulatory obstacle as the high rate of taxation. She sees many adverse impacts including the following:

1. Discourages many small businesses from forming or locating in Vladivostok - or anywhere else in Russia.
2. Pushes many existing businesses to hide true production figures to avoid or lower taxation. Encourages a "no-tax" cash economy which is unfair to those who pay their proper share of taxes. There are also many court challenges to the existing taxes.
3. Makes future local revenues very uncertain due to the lack of compliance. Uncertain revenues in turn make it impossible to effectively plan multi-year projects to completion.
4. The current revenue-tax collection system apparently cannot cope with the large scale tax fraud occurring in Vladivostok. Her view was that government collects only about 30 percent of the amounts due under the law.

A second major obstacle mentioned was frequent decrees regarding taxes which are often inconsistent or incomplete. For example, a Federal decree exempted a certain business class from production taxation. However, there was no follow-up regulation interpreting the decree which would have allowed implementation of the decree.

E. INFORMATION SYSTEMS AND ECONOMIC PLANNING

The EPD is highly dependent on the City Finance Department and the Krai statistical and Tax Inspection Departments for the information needed to perform its functions.

EPD needs the City Finance Department to provide unit cost information used by EPD to develop specific price controls and tariffs. Finance also generates tax collection data essential to EPD's business development efforts. As the unit responsible for accurate tax collection information, the Krai Tax Inspection Department has the tax database needed by EPD. Also, the Krai Statistical Committee (much as the local office of the U.S. Census Bureau) provides essential economic and (potentially) demographic data needed by EPD in its quarterly and annual reporting as well as its economic development programs.

In many ways, the EPD functions as an "information middleman", collecting information from one source, then reformatting and reporting the information to the Mayor. In some instances (example: targeted business assistance program) much EPD analysis is performed on the data received. In other instances (quarterly economic reports to Mayor), reformatting the data seems to be the primary EPD focus. In the latter, there are opportunities to reduce the manual reformatting effort through an organized data sharing and transfer with the above organizations.

EPD data processing resources are limited to four stand alone microcomputers and three printers - all functional but outdated. In an attempt to assist the EPD and other selected City departments to meet their information needs, the City's Information Systems Department (ISD) was created. Currently staffed by four professionals, ISD serves those City departments located in the "grey building" which do not have their own information systems staff. Other City departments, outside the "grey building" are independently providing for their own data processing needs. This somewhat arbitrary and artificial definition of the customer base of ISD severely limits what this department can contribute to the City in terms of the use of its data processing resources.

Requests for assistance to ISD are served on a "first come - first served" basis. The EPD has used ISD's services in the past, including the recent installation of a telecommunications modem in the EPD. No information systems plan currently exists in ISD, but the Director believes resources now available are far too short for the demand.

The ISD is not yet involved itself in any major transaction processing system for the City (purchasing, general accounting, payroll, inventory control, etc.). To date ISD has limited itself mainly to stand-alone microcomputer applications. This limitation poses a significant training and experience challenge to ISD once the City's Financial Reporting and other similar systems have been installed. Such large corporate databases and processing needs will require routine enhancement and maintenance support which should desirably be available from ISD.

A three phased \$750,000 local area network (LAN) project is planned with the initial phase one installation during the first quarter of 1995. Initially, 15 computers will be connected to a single server which will apparently house the network major data bases. EPD computers will be included, although the major impetus behind all three phases of

this project seems to be the financial applications. The second phase involves expanding the City LAN to 45 computer work stations and also installing five additional LANs, one in each of the five Raions. The third and final phase calls for the design and installation of a Citywide financial accounting and reporting system using a vendor software package on the City network.

There are numerous issues to be addressed during each of these phases. The three most crucial issues involve:

1. The financial policies and business practices which must be clearly defined, documented and put in place prior to system installation.
2. The approach to project direction, management and control during the three phases.
3. How to properly structure the necessary data sharing to meet EPD information needs, improve control and eliminate unnecessary manual effort.

F. STAFF CAPABILITIES FOR ECONOMIC PLANNING & INFORMATION SYSTEMS

The authors did not have the opportunity to examine the qualifications of the staff of the EPD. However, there is a clear need and desire on the part of EPD leadership to learn about new opportunities for government-business partnerships. Vladivostok and its Economic Planning Department are attempting to evolve from a local government whose economic development practices were dictated and financed by the central government to a more local incentives and market driven development effort. In this evaluation, it is necessary for city leaders to expose themselves to the successful experiences of other local governments and the people who are responsible for those programs. It is also necessary for these leaders to learn of various methods of project financing which will attract the funds necessary to close the substantial infrastructure deficit which currently exists in Vladivostok.

The four professional staff of ISD possess university diplomas and are familiar with major microcomputer software programs (spreadsheet, D.B., graphics, WP). Apparently some have functioned as programmers on a local area network. However, according to the ISD Director, neither he nor his staff has any local network management experience. Also, as mentioned above, the staff also does not appear to have any experience with large transaction processing or financial reporting software such as general ledger/financial reporting.

IV. Conclusions/Recommendations

The conclusions and recommendations which follow are the result of lengthy review by the authors of various information sources, including background reports from RTI, interviews with various city officials and staff, numerous and informative discussions with the resident manager and our own observations while in Vladivostok. There were many hours of review and discussion between the authors before and during the writing of this report. Of course, we rely heavily on our over 30 years of combined experience as officials directing the finances of Milwaukee, which is a port city, has an international airport and is quite similar in size and climate to Vladivostok.

A. ECONOMIC PLANNING DEPARTMENT

Mission, Organization and Responsibilities

The City of Vladivostok is at a crucial crossroads. The opportunity to attract new trade and commerce to the City has never been better. But the obstacles to this expansion are many. The City's infrastructure funding requires billions of dollars which are not available. The quality of City services is straining under fiscal cutback. The City and its neighboring local governments are just beginning to adjust to a more open economy and have not yet embraced representative government. The future is indeed uncertain.

The Economic Planning Department (EPD) finds itself at the center of this uncertainty. Given its current economic development responsibilities and the interest of its present director, the EPD appears to be in the best position of any single City department to provide the leadership needed for this economic revival. At the present time there seem to be too many City bureaucracies involved in vital economic development activities without effective coordination. There is a separate privatization agency. Land Resources Planning is independent of the EPD. International Relations is still another separate entity. The City of Vladivostok needs a focal point for its economic development efforts. The EPD can be this basis focal point.

Recommendations

1. Clarify and expand the mission of the current EPD as the focal point for the City's Economic Development effort.

Under this expanded mission, the EPD would have three major responsibilities:

- Be the Mayor's policy arm for economic development. In this role, the Department director would be the Mayor's spokesperson on all economic matters.
- Be the clearinghouse within City government for all major decisions affecting economic development.
- Be the unit which establishes the City's economic development strategy which would set the long and short term goals for economic development and the actions necessary to accomplish them.

The EPD mission should be clearly documented in a Mission Statement. This statement should describe in broad terms the development goals for the City and how that translates into a set of department responsibilities. A set of goals might include the following:

- Develop effective programs to attract and retain business and residents which will expand job opportunities and strengthen the local economy.
- Encourage the private capital investment essential to restore the City's infrastructure and improve the level of services.
- Achieve and maintain a proper balance of taxes and public services acceptable to citizens and businesses alike.
- Consider alternate methods of delivering City services, including private sector contracting where substantial cost reduction or service improvement is likely to result.
- Retain local control over the direction and character of major development directions of the city.
- Establish and demonstrate the financial integrity of government, including full disclosure of tax collection performance and business assistance efforts.
- Provide for the regular reporting of City financial status and results of operations on an audited basis-improve the level of tax compliance.

2. *Change the official title of the EPD to the Economic Development and Marketing Department. (EDMD)*

This title would make it clear to citizens, businesses and others dealing with City government that this is where they should go to seek information about the City's role in development. It also underscores another essential and expanded role for the new Department - that of marketing the city and its assets. More will be said of this function below.

3. *Consolidate the economic development related functions currently performed in other City departments/committees into the new Economic Development and Marketing Department (EDMD).*

As mentioned earlier, there are numerous departments conducting mission critical functions regarding economic development without any co-ordination with the current EPD. Better co-ordination is a must. It appears, from their titles and from our limited overview, that certain functions of the Privatization Agency, the Land Resources Planning Agency and the International Relations Department should be consolidated into the new EPMD. There may be other departments/agencies who perform economic development activities that should be transferred as well. This should be carefully examined after the EPMD Mission and guidelines have been documented and have been formally approved by the Mayor.

4. *Transfer certain routine administrative functions out of the new EDMD to other departments.*

Certain routine reporting functions should be transferred from EPMD to the City departments administering the program. For example, the desk construction monitoring activity could be performed by the Architecture or Capital Construction Departments.

5. *Establish a Convention & Tourism Division.*

Vladivostok is a city strategically located along the Pacific rim and has great potential for development as a convention and tourism center. A concentrated effort should be made to define and tap this market potential. As an alternative to a division within EDMD, there could be formed a separate Tourism and Convention Corporation, made up of the Mayor, the new EDMD Director and members of the private sector. The private sector members might include hotel, restaurant, entertainment, bankers, developers and other business entities who would have a special interest in this activity. A feasibility study could develop a central City identity and theme to attract visitors, identify the most critical facilities needed, costs, financing etc.

6. Develop a strategic plan for attracting and retaining desirable industry/business.

The City Department of Economic Planning and Marketing should continue its analysis of types of businesses that the City should consider for assistance. However, such analysis should begin from the perspective of what the natural strengths and weaknesses of the city are in defining the potential future market for each industry's market. What is derived from such an examination is the target industries which are most likely to create jobs, improve tax base and in general improve the quality of life for the residents.

Once a conscious decision has been made and approved by the mayor, a specific program should be developed to attract and retain this desired type of industry. The plan would include:

- a program for attraction of new industry. It would involve an assessment of various industry groups in order to establish unique strengths and weaknesses in potential growth, financial performance and resource availability;
- an identification of target markets, both foreign and domestic, to determine the focus of the City's attraction efforts.
- development of an overall attraction strategy based on criteria established relative to company size, potential earnings, space requirements, etc.
- the program for retention would involve the early identification of high-risk businesses that are in danger of failing because of financial, competitive or industry conditions. Sufficient advance warning should be provided to allow the City to either help in retaining the failing business or to attract a replacement if failure is imminent.
- an updated economic profile of the city and region should be prepared . It would include information about size, population, rankings and comparison with other cities and regions, employment and income, infrastructure, natural resources, industries and services provided.

7. Analyze the city's public utilities and other major enterprise groups (water, sewer, port, airport, electric, transit, etc.) to come up with a plan to eliminate or reduce the large subsidies now required.

In addition to instituting operating efficiencies which may substantially reduce costs over a period of time, we believe other changes are needed. The City may wish to consider public-private partnerships or even full private ownership as a method

obtaining the capital needed to maintain and improve the infrastructure. For examples of such economic partnerships, see recommendation number eight below and exhibit two. The taxes required for these large subsidies are now a serious deterrent to economic development and a problem which must be addressed.

8. *Establish a Vladivostok Economic Development Corporation*

One method of attracting private capital investment and at the same time retaining local control over the direction of local economic development is through the creation of a quasi-public corporation, that is, an Economic Development Corporation.

The Board of Directors of this Corporation could consist of the Mayor of Vladivostok, the Governor of the Krai, the City Finance and Economic Development and Marketing directors, and a private sector member or members. Private sector participation could include business leaders from a leading bank, a construction firm, etc.

The City and the Krai would agree to transfer title to owned businesses as well as vacant or underdeveloped land, idle factories, etc. to this Corporation. In turn, the Corporation would sell shares which would reflect the asset value of the property transferred to it. Funds derived from this equity sale (and other government loan subsidy if required) would then be used to prepare the properties for sale to a private developer or owner operator. Proceeds from the sale of stock would be recycled to make still other acquisitions - and pay dividends if revenues are sufficient. Where practical, the operating businesses would be sold to private investors. However, until suitable buyers are found, the Corporation would attempt to make a profit. This structure is already being applied in other newly opened market countries to induce private development.

9. *Develop a land use plan and a zoning ordinance that provides authority for enforcing the plan.*

In the earlier stages, all development may seem desirable. However, certain incompatible land uses may pose safety hazards, reduce the quality of life for nearby residents or prohibit development of nearby property. A land use plan sets out the general types of property development (residential, manufacturing, recreational, etc.) permitted in a given area. Such a plan encourages compatible development and helps avoid troublesome lawsuits caused by conflicting property uses by adjacent property tenants.

A zoning ordinance defines more specifically the permissible land uses, with criteria to determine compliance (Example: high density residential is defined as 40 households per acre).

10. Develop a marketing plan for the City.

With the help of the targeted industries identified in recommendation 6 above and the convention/tourism efforts from its new division (recommendation 5), the Department should pursue whatever additional steps it can take to make it easier for potential employers to find out about Vladivostok and locate a business there. Some ideas to consider:

- Land Bank inventory with streets, sewer and water mains already installed and the land subdivided for future industrial use. This could also include existing unused or under-used property.
- "One Stop Shopping" for all City licenses and permits needed to start a business.
- Business Consulting Assistance for newly formed businesses.
- A Business Incubator, that is, an office building owned by the government providing low cost office space, secretarial services to new service/trade businesses which rent space there until they can afford their own space.
- Loan Assistance or Credit Guarantees to help companies in targeted industries.
- Enhanced ("glossy") promotional literature targeted to port users, manufacturers, etc. providing data about available City assistance and co. phone numbers for further information.

11. Begin a multi-year surveying effort aimed at establishing legal property boundaries throughout the City.

It is essential that to accelerate the level of private development the City gain and use the authority to grant private title to property. While the City does provide long term leases, a tenant will be discouraged from making substantial property improvement until title to that property is acquired. In addition, revenue from the sale of such property can be used to upgrade a badly deteriorating infrastructure.

While this effort will require years to accomplish, title companies could be enlisted to assist. The areas holding the most potential for sale could be covered in early phases with other phases to come later. To the extent possible, surveying costs could be passed on to the buyer.

12. Establish Mayoral decrees or other formal mechanisms for implementing the above recommendations.

Many of the recommendations above involve important City policy and budget decisions which must be further discussed before consensus is achieved. Also, numerous recommendations require follow-up to determine the specific content and likely implementation approach.

Once the Mayor decides to move ahead, there should be some formal method of documenting the specific decisions he has made so that these decisions can be properly and consistently carried out. Before any action is taken, such methods of formalizing the City's policy decisions should be agreed upon. Such decrees or other formal actions then become pre-requisites to implementation.

B. INFORMATION SYSTEMS PROJECTS AND THE INFORMATION SERVICES DIVISION

The City of Vladivostok has begun the first of three local area network (LAN) projects aimed at the implementation of a LAN system in both the City and the five Raions. Projects one and two involve establishing a basic, then expanded set of LANs. The third project would install a citywide financial accounting and reporting system to serve the various City departments.

With the first project already underway, the authors will focus on comments related to completion of the expanded City LAN and the City financial system projects as they affect the City.

Expanded LAN System Project

In terms of funds expended, the expanded LANs system project is by far the largest of the three projects, consuming an estimated \$610,000 of a total \$750,000 budget. The hardware plan is outlined and there is a schedule for purchase and installation of the necessary hardware and software. However, the authors were unable to identify what the project objectives or intended benefits were for this effort. Project leaders/funders must decide whether this project is intended simply to link City microcomputers together in a series of LANs, or whether other benefits were sought. A simple linkage does accomplish minimal objectives. It is a low risk project. It will allow for E-mail and data transfer between computers within and among City departments.

A more expansive LAN project would go beyond the mere linking of microcomputers. It would seek to achieve an integration of the current stand-alone microcomputer reporting, spreadsheets etc. into a true multi-application information system. Under such a system, there would be a consolidation of data files, eliminating redundant, inconsistent data and substantially reducing manual effort. Financial and staff savings potential is substantial. Information would be shared among individual users and departments and departments of the Krai government. This would make possible expanded reporting capacity for managers citywide. More City employees would learn to use the system and benefit from the expanded capabilities of the system.

There is little question that Vladivostok will computerize many of its activities. The central issue is whether this effort will truly add significant value to the organization. A basic "re-engineering of databases and current management practices is needed. "New ways of developing budgets must be...adopted. It is important not simply to take the existing system and computerize it...A total system ...must be reviewed..."³).

Recommendations - LAN Project

If the City intends to achieve an expanded LAN project, that is, a citywide information system, the following suggestions are made for consideration after completion of the basic LAN installation:

1. *Acquire a full time Project Manager.*

This position is responsible for the success of the project. The position must establish project scope and objectives, work program and schedule, create a Users' Group, project team, resolve problems, make key project decisions and monitor and report project status to City management. These terms are defined below. Desirably, this position should be filled by a competent City systems manager. Failing this, the ISD manager would work closely with the consultant project manager throughout the project in order to gain sufficient experience to potentially assume this position in the next project.

2. *Establish a Project Scope and Objectives Statement.*

This statement clarifies what major business benefits (example: access to socio-economic information from the Krai) are expected from the project and where these benefits will be found. The statement also bounds the intended system stating what functions and departments will and will not be included. City management should sign-off on this document.

³ Municipal Finance and Management Project. Vladivostok Assessment Visit. Chetwynd, Alloway, Johnson; January 16-27 1994.

3. Create a Users' Group and establish a Project Team.

A Users' Group is a body of top level representatives from the Mayor's office and from each major user department expected to use the City's information system regularly. This Group would also include a representative of the Raions and Krai government to assure adequate input on all major project decisions.

Initially, an RTI Project Users' Group would be established for the overseeing of the three-phased RTI financial systems installation. If successful, this Users' Group could be established as a permanent body, with two major functions:

- consider and set priorities for data processing projects throughout the City.
- establish an annual information processing budget for the Mayor.

The staff which would perform the day-to-day work constitutes the Project Team. These should be individuals willing and able to work with a variety of City department managers to understand their information needs and help bring about consensus.

4. Prepare a Project Work Program/Schedule.

This document breaks the project into work segments and tasks, assigns each task to a project team member, defines the work products resulting from completion of work segments, and schedules the work over time given the available time of team members. See Exhibit 5 for an example of a work program format.

5. Develop a System Functions & Features Statement.

Building on the Scopes Objectives Statement above, this document provides detail on the specific data processing features to be produced by the system (example: on-line access by the Economic Planning Dept. workstations to household income and family size data produced monthly by the Krai Statistical Committee).

6. Inventory current data needs and develop a proposed data model.

During this step the using departments document their current reports, data sources, the data elements of each as well as unfulfilled information needs. This documentation forms the basis for the database consolidation and resulting data sharing. See Exhibit 4 for a simple format for a data report and sources inventory. A data element inventory would be based on the specific content of each report and source. Potential automated databases for use by the EPD are summarized in Exhibit 3.

7. Monitor and report project progress and status on a continuous basis.

The Project manager must continually assess the status of each work task as it proceeds to completion, estimating the time to complete. Using this information, the Project Manager can estimate a percent complete for the project a completion date for each project phase.

Financial Accounting And Reporting Project

The Project budget for this phase is \$50,000. It calls for the installation of a Citywide financial and accounting system utilizing vendor software. American Management Systems (AMS) software, known as their Local Government Financial System (LGFS), is currently being considered. This budget amount seems very low and may have to be increased to as much as \$100,000 - \$175,000. This may be required to acquire the full financial, database, operating system and reporting software, related first year license fees and the needed vendor design and installation assistance

Although the authors have no "hands on" experience with LGFS, they have worked with AMS extensively in the City of Milwaukee. The City of Milwaukee acquired AMS payroll/personnel software known as GHRS. It was installed successfully in Milwaukee in 1990 and continues to function well as did the AMS consultant staff hired to assist the City. The AMS LGFS product for the mainframe computer is installed throughout many cities in the U.S. and has a reputation for reliability and performance. However, the LGFS network product is very new and has a limited client base.

From both a staff education and software evaluation standpoint, it would be important for the City systems personnel who will lead this project to visit at least one of the Russian cities which have installed the network version of LGFS.

Recommendations - Accounting and Financial Management Project

We have reviewed the Financial system report prepared by Mr. Reddy and believe it sets out some important business features which can be very useful in controlling spending and ultimately maintaining a balanced City budget. For example, the implementation of encumbrance accounting can avoid the risk of contracting for services without adequate budgeted funds. Also, all of the steps outlined for the expanded LAN project are applicable to the Financial systems project (Project Manager, Scope & Objectives Statement, Work Program, etc.).

What follows is a brief description of additional project steps essential to a successful

implementation of the accounting and financial reporting system. Desirably, both the steps outlined above and the following steps should be incorporated into a Financial Systems Development Work Program and Schedule which can then be used as the basis for work assignments, project scheduling, progress monitoring and, ultimately, vendor payment. The following steps should be taken:

8. Define duties of the project director.

The City will want to rely heavily on the software vendor's (AMS or?) lead person to guide the Financial system's project. However, it would be advisable to also engage a co-project manager who should be a city employee. The role of this person would be:

- To negotiate a fair contract with the vendor and oversee the vendor's performance throughout the system development effort.
- To see that City policy decisions are made on a timely basis.
- To assure that City user needs are incorporated into the system functions and features and that essential data sharing/consolidation and business process changes take place as intended.
- To regularly report project status and progress to top City management.

The vendor wants to do a good job but is normally pressured by time and budget constraints to "get in and out" as fast as possible. The City's co-project manager keeps this from happening as well as keeping the project on track by making decisions and making sure the City fulfills its commitments.

The co-project manager could come from the City ISD, the Finance Department or a consultant. The first two alternatives are obviously more desirable than the third. If a consultant must be employed, to save funds the City might seek out an experienced finance officer or financial systems person who is currently retired or is willing to take a leave of absence from her/his current job.

9. Determine the interface requirements of Other City systems/business processes.

The City's Accounting and Financial Reporting System will not operate as a stand-alone system. To function properly, it must be integrated with other City systems, be they manual or mechanized.

For example, the City's financial system includes bill payment and related accounting known as accounts payable. This accounts payable subsystem must be carefully integrated with City purchasing and inventory control system and

procedures. In fact, such a project usually provides a good opportunity to evaluate current procurement practices to find ways to make procurement more effective (lower prices by increasing competitive bidding) and efficient (reduce paperwork). One practical benefit of proper integration of these systems is having a single City vendor file used for both purchasing and accounts payable functions. Also, without proper integration with purchasing procedures, encumbrance accounting and the resulting improvements in budgetary control cannot be achieved.

Similarly, the City's financial system must be properly linked to existing payroll and labor distribution functions. These refer to payment of City employees, making appropriate deductions and withholdings, and collecting and recording employee time to make data available for external billing for City services and other management purposes. The City may find the possibility of billing for services it now provides free of charge (Example: charges for garbage collection for commercial properties). To assure billing accuracy reflecting up-to-date costs, current billing rates depend on accurate labor hours distribution to this activity. Even if the City's current payroll system is a manual cash system, interface requirements should be thoroughly addressed.

System-to-system controls must also be carefully designed as a part of the integration so that the proper data is transferred to and from the new financial system.

It takes time to figure out how the City's employees, business practices, computer system and manual procedures should fit together. It requires much discussion and co-operation among and within City departments. However, system success depends on such efforts.

10. Design user custom reports and screens.

The AMS LGFS and other reputable vendor software contain most of the basic reports needed. However, because each City is different, additional system generated reports are always needed to replace current manual reports and meet other user needs which are not a part of the vendor reporting features. Project team members should design these reports together with City users down to the rows and columns needed, the data sources, frequency of production, intended distribution, etc.

Once designed, these custom reports can be programmed into the financial system using the vendor's financial system reporting software or other acquired report generator software tools. To avoid continuing user changes, written user signoff should be required for the custom reports.

11. Design the new consolidated database structures.

An essential business benefit being pursued through the financial systems project is the elimination of redundant databases. These new, consolidated databases must be designed from a "logical" (business needs) standpoint so that the database software (DBMS) can accommodate them.

For example, instead of re-creating the taxpayer database from manual payment orders received from banks, Finance may want to use the system software to get tax data directly from the Krai Tax Inspection Department. This would also enable the Economic Planning Department (EPD) to access this data for its purposes. Many benefits would result. Neither Finance or EPD would have to re-key the data. Errors in re-keying would be eliminated. The data would be available much sooner. Significant labor savings would result.

The relational DBMS software available⁴ for networks can make possible easy direct user access to such information with training for frequent users and access with minimal help from ISD for infrequent users. But these major benefits will be lost without careful and deliberate planning and co-operation during this crucial design step.

12. Develop new procedures to accommodate the new reports and controls.

Just as new computer software and programs must be developed, so must the manual procedures surrounding the use of these computer programs.

13. Create the new databases, parameter tables.

Decisions regarding converting from the current to new data bases must be made. When is the new chart of accounts to be started? (Normally implemented at the beginning of the new fiscal year.) Are old vendor and accounts payable files to be phased out on a "this day forward" basis or completely replaced at the time of conversion? Parameter tables which contain key variables (pay rates, deduction rules, etc.) would be designed. Such tasks are required for this step.

14. Compile and test all custom programs.

The purpose of this task is twofold: as custom programs are completed they must be "debugged"; secondly as these programs are completed their operation with the vendor software must also be tested.

⁴ Oracle (Oracle Systems), Sybase (Sybase Inc.), SQL (Microsoft Corp.), DB2 (IBM) are examples

15. Train trainers/users.

The vendor should be training the City technical DP personnel throughout the project, but at this time some formal training is conducted to assure their understanding of system operation, maintenance and support functions. Also, key users are trained by the vendor in the system's use from new LOGON, security procedures, Graphical User Interface, forms, reporting options and facilities, error messages, etc. Then these trained City users train other City personnel who will regularly use the system. This assures that City personnel can operate and use the system after the vendor departs.

16. Perform system test and require formal city acceptance of new financial system.

Given completion of the testing of all computer aspects of the system and the training of affected personnel, the entire system should now be formally "road tested" before it is put into operation. Manual as well as computer procedures are conducted as a part of this test. Questions are answered. Changes are made where required.

Ultimately, the City should accept the system in writing as operational before making final payment to the vendor. Typically, 5-15 percent of the vendor fee should be withheld as a part of the contract until this written acceptance occurs.

Role Of The Information Services Department (ISD)

Limited to four professional staff without extensive network management or Citywide systems experience, this Department's role in the information processing business of the City is likely a limited one. This will continue to remain the case unless changes are made.

The City is not likely to benefit greatly from any attempt to centralize all data processing. Large departments would probably resist such efforts. Moreover, in a network based information environment, ISD can contribute substantially to City processing as a complement to such current and future networks.

Recommendations-Information Systems Department

The authors suggest that ISD's future role should center on five major functions, as shown in #'s 17-21 below, in addition to its responding to requests for department application assistance.

17. Set network standards.

ISD should establish standards for the creation of new networks, enhancements to existing networks and other material changes to network structure and features. In addition, ISD should also set standards related to application programs being implemented on department networks. The purpose of such standards is to assure maximum data sharing and software and network data transferability within the City's network structure. Without these standards the potential benefits of a network structure will be reduced substantially.

18. Manage networks.

ISD should maintain, support and enhance single department networks where such skill is unavailable in the affected department. Also, while there may exist single department networks, the City will ideally evolve into multi-department inter-networking (connecting two or more LANs) operating across departments, the raions or Citywide. This requires ISD to perform similar support functions for these more complex structures. The best network experts should be resident in ISD to serve these functions.

19. Set up database administrator.

If the City is indeed going to begin to eliminate duplicate, inconsistent databases and share these among using departments a data administration function is needed. This function includes setting and enforcing standards for data definitions (example: the employee database shall include name in the following format "Last, First, Middle" placed in the first three fields of the employee record). This assures that the same types of data generated from different sources can be shared.

Also, this function would address the physical security of City hardware and software to prevent unauthorized entry to DP facilities and damage due to natural disaster. Data security to prevent unauthorized access to data would also be addressed. Fallback and recovery procedures would be developed by the DB Administrator.

This function also provides assistance to departments on how to structure new DBs using the available software tools and how to access other departments' DBs. The DB Administrator also makes sure that new DBs are not created when already available DBs can serve or be modified to serve newly defined user needs.

20. Guide project management.

Much has already been said about the central role of the project management function in the development of new and enhanced systems. Ideally, ISD should be the source of these project management skills - either functioning as project manager or consulting with departments starting a systems project so that they can effectively run their own project.

21. Monitor systems (Auditor role).

As large computer networks are developed, these become a more crucial part of City operations and the City becomes more dependent on DP for its day-to-day business. A DP systems audit function then becomes necessary to assure that systems are designed with proper controls and to audit existing systems for the operation of these controls. This function could also be placed in Finance or in a separate audit division to assure independence.

C. CAPITAL IMPROVEMENTS

Capital improvement investments involve the construction of facilities which provide services over a long period of time. This is in contrast to the day-to-day City expenses whose value is consumed in the same year as the expenditure. These capital improvements normally cannot be relocated and therefore have limited flexibility once put in place. They represent, in most cases, infrequent but large expenditures which are financed with some type of borrowing. For all of these reasons, the City should examine its current planning process in light of opportunities for improvements.

The EPD prepares its multi-year program as well as its annual investments intentions report. These documents can be used as the basis for a capital planning process which brings together the City, the Raions and Krai governments to lay out a set of fully funded capital projects which respond to the most crucial needs. However, in order to do so, we believe that the capital planning process needs to set a clear direction for the types of capital improvements which will receive most attention over a period of 4-6 years. We also believe that the process should be broadened to formally include both the Raions and the Krai. Other City officials also need to play an active policy decision-making role.

Recommendations

With these considerations in mind, the following recommendations are presented:

- 1. *Create a Capital Improvements Committee (CIC) to set priorities and adopt a multi-year capital improvements program and annual capital budget.***

The CIC would oversee the capital improvements planning and budgeting process. The Committee would report directly to the Mayor and include the EPD And Finance Directors, the Deputy Mayors for Fiscal Affairs, Public Services and Public Housing & Construction. A representative from the Krai, the Raions and a private sector representative should also be considered.

- 2. *Establish a set of Citywide criteria which can be used to establish priorities among projects.***

The Committee would establish criteria for setting capital project priority. For example, the Committee might see projects that protect essential safety and health as the highest priority followed by federally mandated projects, business development projects, etc. Each project would be scored according to each criterion depending on the extent to which the project served that criterion. This would serve as the basis for project ranking.

- 3. *Inventory the current status of infrastructure records. Devise a timeline for developing and maintaining an up-to-date, automated infrastructure facility database.***

Once the CIC has been formed, begin a "quick & dirty" review of the status of inventory records. What do the City records contain regarding city streets, sewers, watermains, etc.? Following the assessment, devise a phased update and expansion of the infrastructure records system. This can be started simply using microcomputer database software such as DBase.

The basic fields or data to be included in each record would be a basic identifier (arterial street, collector sewer, etc.), location, physical/engineering description, maintenance record, and where possible, condition rating. The records should be defined as physical segments of infrastructure (an identified multi-block area of sewers, streets, watermains, etc.). As the database takes shape in later months, these multi-block segments could be further broken down into individual block segments to achieve more specificity.

4. *Begin to develop physical condition ratings for those infrastructure facilities most in need of attention.*

The City has probably already visually identified many facilities which are already failing or rapidly deteriorating. However, it is often sewers, watermains and other underground facilities which seem to fail unexpectedly. The City and its CIC should strive to expand the infrastructure database to include condition ratings for major segments of sewers, watermains, underground electrical network as well as major streets and bridges.

Many US cities have achieved a degree of success in forecasting the future breakdown of streets, sewers, etc. using these ratings. In doing so, these cities then target those facilities nearing failure in order to prevent it. Certain non-traditional measures have proven effective in measuring physical condition. For example, monitoring the incidence of watermain breaks has become an accepted if indirect measure of the condition of the water distribution system. This focuses engineers on factors such as location, breakage temperature, subsoil condition and the material composition of the pipe associated with each watermain break. The object is to reduce high break frequency locations which would promote replacement BEFORE failure occurs.

Similarly, periodic videotapes have been used to monitor sewer condition and predict points of eminent failure. For bridges, detailed numerical performance or "sufficiency" ratings are used in the US to determine bridge condition and predict its future safety and performance. Many other proven condition rating methods are available and documented.

5. *Consolidate the separate capital plans for City, Krai and privately financed capital improvements into a Unified Capital Improvements Plan.*

As we understand it, currently separate capital plans are prepared for City capital improvements depending on whether they are funded from City, Krai, federal or private sources. To clearly link a capital improvements plan/budget to its intended objectives, the major capital projects of all governments within the geographical boundaries of the City need to be considered. If projects are segmented artificially by Raion, City, Krai, etc., the "spillover" effects of a major street or sewer system which crosses these political boundaries may not be properly co-ordinated unless the needs of all jurisdictions are considered together. Financing for the entire project should be an essential part of the Capital Plan and Budget for any and all projects included.

6. Retain a 10-15 percent budgeted contingency which can be applied to projects as needed to assure completion.

The Director of EPD mentioned that a number of buildings approved in earlier capital budgets were under construction but had to be left incomplete due to a lack of funds. Given the high rate of inflation, the danger of this recurring is substantial.

Of course, sound project cost estimating and active on-site project monitoring can help. It would also seem advisable to budget fewer projects and allow a 10-15 percent contingency to meet unexpected shortfalls. While reducing the number of projects budgeted, this action will probably increase the number completed. Also, the Finance Department should be consulted for each major capital project to suggest methods of finance and assure the adequacy of project funding BEFORE a project begins.

D. STAFF TRAINING NEEDS

Economic Planning Department (EPD)

The training priorities of the EPD will depend heavily on whether or not the Mayor agrees with this Report's recommendations regarding the revised mission of the Department. The Department would be renamed the Department of Economic Development & Marketing (EDMD). As this name would indicate, the department focus would be to establish a clear development vision for the City, develop a workable action strategy for accomplishing this vision and then work with other City, Krai and private entities to accomplish the vision. The following training/tour recommendations are premised on this expanded department focus.

Recommendations

- 1. Tour two to four major US cities which have developed effective city development and marketing programs. Investigate the major programs, interview key elected and development officials and investment bankers.**

Assuming that the Mayor agrees with this suggested role for the EPD, the primary focus of training for this Department would be to expose its leaders to modern economic development and marketing techniques currently in place elsewhere. The Mayor, EPD Director and, depending on the available budget, the Finance Director and the Mayor's First Deputy of Fiscal Affairs would be a part of the group. The authors' suggestion is to select two to four US cities which are somewhat similar in size and climate to Vladivostok. These cities should also possess a high bond

rating which would underscore the quality of their economic development programs and overall fiscal management.

Another activity that could be extremely beneficial would be a conference with leading US investment bank representatives. The purpose of such a conference would be to explore the types of public--private partnerships that could attract significant sums of investment capital into the City of Vladivostok. With sufficient advance notice, RTI representatives could arrange for a number of experienced investment bankers to share their thoughts and ideas. This could occur as a face to face meeting of all participants, if feasible, or as a combination in-person and teleconference meeting.

The specific cities can be selected in conjunction with the Government Finance Officers' Association and the host cities. Potential cities would include the cities of Milwaukee, Wisconsin; Minneapolis, Minnesota; Indianapolis, Indiana; Cincinnati, Ohio; Dayton, Ohio.

2. *Include capital improvement planning and budgeting techniques as part of the multi-city tour.*

If capital improvements review is pursued, the team would investigate project priority setting criteria, how these criteria are established and communicated to the participating departments, and how the criteria are applied to select projects. Capital facility records and records maintenance should also be reviewed to determine what information is maintained and how it is used to select projects. For example, the use of physical condition ratings for infrastructure facilities is central to priority setting in most well managed capital programs. The team will also want to understand the procedures which link capital plans to their respective capital budgets and how those budgets are monitored. Project status monitoring techniques at these cities would also be examined.

If the area of capital improvements planning (CIP) are considered essential, the Public Services, and Public Housing and Construction Deputy Mayors might be appropriate additions to the team. Dayton, Ohio should be included because of its noted accomplishments in this area. Another City known for its CIP accomplishments is the City of St. Paul, Minnesota. It is located adjacent to the City of Minneapolis.

As a part of preparing for the multi-city tour, relevant information would be requested from each city and mailed to Vladivostok so that participants would be able to review the material in advance of the trip.

3. Train appropriate staff of the Economic Planning Department in selected forecasting software.

With the necessary data sharing discussed in Section III B above, much of the EPD software needs can be satisfied with simple word processing, spreadsheet, graphics and database software. During the orientation as a part of the network installation, affected EPD staff should also learn the network's Graphical User Interface (GUI). This will enable staff to "navigate the network" to get the information needed. ISD and/or the network vendor should provide such training.

There are two additional types of microcomputer software which can potentially be of use to this Department. For prices beginning around \$650 US dollars, powerful forecasting software is available. Numerous products are available⁵. Most of these products provide a variety of time series forecasting techniques. Input data can be entered manually, transferred from another microcomputer file or downloaded from a mainframe computer file. The software analyzes forecasts using various forecasting techniques, then indicates which technique is likely to produce the best forecast. The software also comes complete with colorful graphics capabilities. The enhanced versions can produce literally hundreds of time series forecasts in minutes.

These forecasting packages are easy to learn and normally are accompanied with self-teach tutorials. Given its substantial reliance on statistical measures and forecasts, the EPD could well utilize such a forecasting tool. Prices range from \$600 - \$650 US for the most basic version to \$2,000 - \$3,000 US for the most enhanced version.

4. Train appropriate staff of the Economic Planning Department in the use of the Urban Land Institute's Development Impact Software.

Another type of software which could be of assistance to the EPD is known as "Development Impact" software. While there are many variations, this software is intended to be used by urban planners in assessing one or more of the following: land and other physical requirements of a proposed development project, economic impact, government services/fiscal impact and occasionally environmental impact.

Although a number of development impact software products are offered, a 1994 release by the US Urban Land Institute (ULI) holds significant potential. The ULI Model provides a "first cut" assessment of all of the above impacts based on a straightforward menu of questions which the project planner must answer. Developed by urban planners and engineers recognized nationally for their work, the product was developed in conjunction with Rutgers University.

⁵ SmartForecast by SmartSoftware. Forecast Pro by Business Forecast Systems; both from Belmont, MA.

The ULI Development Impact software is sold with a complete user manual fully explaining the structure and operation of the manual. The menus used also promote proper maintenance to keep the model up to date for the city in which it is being used. The model comes in both detailed and "quickway" versions depending on the time/data available and accuracy required. While the urban development standards used (residential densities, classroom sizes, etc.) would have to be recalibrated for Vladivostok, this would seem an appropriate tool for the initial assessment of economic and physical design feasibility. We are not sure of the price, but its maximum cost is probably less than \$1,500.

Information Systems Division (ISD)

As mentioned earlier, the current professional staff have sound educational backgrounds but limited exposure to either computer network operations or large, citywide information systems. If other City departments possess staff having more extensive large system and/or network experience, the Mayor should consider a temporary transfer of such a staff person to ISD until permanent staff are able to acquire the needed experience.

Recommendations

To address the training needs of ISD staff, the authors suggest five areas of training experiences. These are outlined in Exhibit 6 and explained further below:

5. Learn the City's current microcomputer operating system(s).

The first area of training is workstation operating systems. Familiarity with the City's microcomputer workstation operating systems (DOS, OS/2, &/or Windows) is essential to managing program and data files, assuring that various hardware devices (CPU's, printers, etc.) operate properly and to provide assistance to users to get their stand alone applications running properly. Also, the concepts learned in becoming familiar with DOS or other operating system will be useful in understanding the network environment. Current ISD staff may already be familiar with the City's workstation operating systems, but this should be confirmed before proceeding to other training experiences.

Classes are available and can probably be scheduled in Vladivostok if needed. While helpful, these are not essential. Manuals which normally accompany microcomputer purchase can be used for continuing on the job training (OJT).

6 Obtain training in the management and support of the soon to be installed City networks for a least two ISD staff persons.

A manager of a computer network has many responsibilities. She/he must be able to design the network so the data, applications and input/output (I/O) components of the system are structured properly. This ranges from simple LOGON procedures to decisions on where databases will be resident. The network manager must be able to create and maintain an up-to-date directory of users and the applications and network functions each user is permitted to execute. This prevents unauthorized actions to take place on the network. The network manager is also responsible for proper file and system back-up so that operations can be quickly restored in the event of electrical failure, human error, etc. The network manager is a scheduler of activities throughout the day including application software maintenance. The manager must also carefully monitor usage of the file server to keep operations running.

There are a variety of ways in which a systems analyst can become competent in these functions. Documentation (user and technical manuals) accompanying the network software is the basic source. Network software vendors and independent trainers also conduct classroom sessions, normally requiring 3-4 days to introduce to analysts to network management. Also, inexpensive tutorial software is available for some of the more popular operating systems such as Novell's Netware product. Any or all of these sources will be helpful. The City should NOT wait until the network is installed before training unless it is prepared to pay a consultant in the interim for the network management activity.

The ISD Director, at least one of his staff and an analyst from each of those City departments which are expected to maintain their own networks should be trained in the basics of network design, operation and support.

7. Train all ISD staff and selected City department users in the use of the chosen network database software.

ISD analysts must be very conversant with the City's chosen network database software. ISD will be responsible for maintaining the network server(s). The major function of the server is to maintain user databases. The ISD analysts will be able to perform this function and provide users with required data screens and reports only if they have learned to use the network's relational database product.

As is true for the network operating system software, documentation accompanying the software, vendor classes and a few software tutorials are available. Such training can more easily be self taught than the network management function.

8. Train all ISD staff and selected City department users in the use of report generator software if such software is acquired by the City.

Both application and database software are accompanied by reporting tools designed to meet a variety of user batch and on-line reporting needs. However, as the City replaces its old stand alone micro computer reports with reports generated from the new system, many new needs are likely to be identified. It may be appropriate to acquire special report generator software to allow users to do more of their own report design and/or to save ISD staff time in performing these tasks.

Such training can generally be self taught based only on vendor software documentation and trial and error. The decision as to whether or not such software is needed can be made after the first network has been in operation for 6-12 months.

9. Train at least one ISD staff person, one or more in the finance department and other selected user departments in the reporting capabilities of the proposed Accounting & Financial System software prior to the installation of the software.

The proposed financial system may be the first major Citywide information system to be installed in Vladivostok. It is imperative that while the software vendor is on-site, the vendor be required to provide sufficient hands on training to affected ISD and user department staff.

This reporting features training could be easily accommodated in a classroom type setting assuming sufficient work stations are in place in a single location. The vendor would walk those attending through a number of on-line and batch report creation exercises. The user manuals should be referenced throughout so that the users can easily refer to these manuals after the vendor departs the City.

10. Train at least two ISD staff (or Finance Department analysts) in the maintenance and support responsibilities of the Accounting and Financial System software.

In addition to knowing how to use the system to extract financial information, system support personnel must understand how to keep the system running properly. This will include scheduling job runs, maintaining parameter tables, debugging and understanding system error messages, etc.

Like the reporting features, the vendor should use the financial system's documentation as the basis for training. However, topics such as the above should

be part of the technical documentation for the software. During program and system test phases of the system development project, this training should begin.

Both the user and technical training mentioned above should be provided by the financial software vendor as a part of the software contract.

E. OTHER FINANCIAL ISSUES

There are a number of issues that, while not fitting into any of the above categories, present both opportunities and challenges to the City's financial future. This section attempts to highlight a few of the more important Citywide financial issues which require attention, together with suggestions for action.

- 1. Inventory and document current City budgeting, accounting and financial reporting practices. Bring accounting and financial reporting practices into conformance with Generally Accepted Accounting Principles (GAAP). Prepare a Budgeting & Accounting Policy & Procedures Manual. Mandate these standards Citywide by Mayoral Decree.***

The authors were unable to identify the existence a Budgeting and Accounting policy and procedures manual. Such a manual would prescribe budget preparation forms and schedule, the requirements for budget priorities and its presentation format. Regarding accounting, the approved chart of accounts and account code to be applied across all City activities would be detailed. The proper basis for accounting (that is, for example, is revenue recognized when the tax bill is sent - accrual basis - or when funds are received - cash basis) would be described.

Authority for expenditures and the responsibility for their control is also outlined in these procedures as is the latitude and limits regarding budgetary transfers and use of contingent funds.

To the extent that Russia has not established GAAP, US GAAP standards should be reviewed as a basis for establishing such standards as they apply to the City.

Establishing and enforcing sound budgeting and financial accounting practices are prerequisites for budgetary control. In addition, the existence and adherence to such policies/procedures sends a clear signal to potential investors and businesses considering Vladivostok that its local government can be relied upon as a strong business partner.

2. Establish standards and procedures for hiring and promotion of employees and for the procurement of goods and services by the City. A mayoral decree should follow.

One important factor to prospective businesses and investors considering Vladivostok is the integrity of its local government. This integrity is expressed daily in the hiring, promotion and purchasing decisions made by a government. Collectively these decisions comprise the vast majority of government spending decisions. In addition, as important financial matters, these personnel and purchasing decisions obviously have a substantial impact on the cost of services and, therefore, on the taxes imposed on resident and business alike.

It is unclear whether or not either or both of these functions should be centralized in Citywide personnel and purchasing departments. What is clear is that Citywide standards should be developed to assure that these functions are executed in an effective manner.

For the personnel function, a Mayoral decree should set forth personnel procedures based on the following principles of operation:

- That all hiring be performed based on positions having written job descriptions including the knowledge, abilities and skills required to perform the job. This would normally include clear education and job experience requirements.
- That all positions the City is attempting to fill be open to any qualified candidate. That public notice of open positions be required to promote open recruiting.
- That hiring, compensation and promotion decisions be based **ONLY** on the job qualifications of the applicants.

For the procurement function, a similar Mayoral decree should establish purchasing procedures based on the following principles:

- In order to acquire the highest quality goods and services at the lowest cost, City purchasing decisions be made based on open, competitive bidding.
- To increase the level of competition among bidding vendors, public notice of all City requests for bid be required.
- In general, bid award should be given to the qualified bidder who has the lowest cost bid.

3. *Defer issuing municipal bonds until the City has achieved a balanced budget and can demonstrate its fiscal responsibility to bondholders/bond rating agencies. The City should not borrow as a way to balance its budget.*

The authors are aware of the efforts in another Russian city to close a municipal bond sale. It is possible that with inflation indexed bonds and adequate credit enhancement a City bond issue for Vladivostok could be structured and fully subscribed. This course is not advisable because:

- Given the current fiscal status of the City, the issue would have to be accompanied by adequate bond insurance or other credit enhancement. Also, as a new issuer having fiscal problems, Vladivostok bonds would require a higher interest rate and a substantial underwriting effort. These factors would substantially increase the cost of issuance beyond an acceptable level.
- The City should delay its initial offering in the market until it can clearly demonstrate that it has established adequate control over its finances or at least that the City has taken substantial steps toward that end. At that point the bond issue would provide the opportunity for the City to publicize its fiscal accomplishments as opposed to explaining its current fiscal problems.
- Given the scale of investment needed, City bond issues can play at best a minor role in addressing the City's infrastructure and other capital needs over the next decade. Unless substantial capital funds are forthcoming from the federal government, the City will need to consider external sources of financing through some form(s) of public-private partnerships.
- The City should avoid issuing tax/revenue anticipation notes to meet City operating expenses, that is, to balance the City budget. Again, the authors understand that such a borrowing is being pursued in another Russian city. Such borrowing leads to greater budget problems the next year, and ultimate fiscal collapse if pursued repeatedly. Such borrowing used as a "budget balancer" is seen as a sign of poor fiscal management by most potential underwriters and all established municipal bond rating agencies. Balancing the budget should mean paying the full cost of this year's City services with this year's revenues (not borrowing).

4. *Examine each of the 19 local taxes currently permitted for the purpose of increasing local revenue.*

The City is in need of additional revenue sources, not simply to increase revenues now but also to develop greater responsiveness to inflation. Given the loss of Federal revenues, the City should examine the revenue potential and administrative

support associated with the taxes and charges now allowed. While the fiscal gap is not likely to be filled by these new sources alone, carefully selected increases in new taxes/charges would narrow this gap. See Exhibit 7 for a list of 19 permitted local taxes.

5. Hire an experienced financial auditor(s). In co-operation with the Krai and federal governments, the first audit should be a thorough financial compliance and controls audit of tax collections.

The objectives of this audit would be:

- To determine the level of compliance, that is to determine the extent that all businesses and individuals subject to tax actually paid the proper amount of tax. If possible, databases should be matched (Example: Business Registry database with tax files/payment orders) to identify potential non-payers and fraudulent/incorrect information.
- To determine if adequate controls exist in the current system to identify errors, fraudulent returns and non-payers in a timely and accurate manner.
- To recommend improvements in tax collection system controls to improve its performance.

The scope of the audit would include the corporate and personal income tax, the VAT tax and the excise tax(es). Organizations audited would include City Finance, Krai Tax Inspection and selected banks.

As a part of this audit, a valid sample of businesses and individuals should be selected for taxpayer audits to verify the accuracy of the tax calculation for these entities.

6. Consider establishing a permanent City Audit Division reporting to an independent board.

The tax audit recommended above will require at least six months to one year to accomplish depending on staffing, the condition of the tax records and the level of co-operation. Assuming its success, the Mayor may wish to consider making the independent audit a permanent function within the City. An effective audit function will normally return many times its cost through its recommendations and findings. Furthermore, a permanent audit function encourages responsible management while discouraging fraudulent activity.

7. Strengthen ties with the federal government to encourage fair consideration of the city of Vladivostok's fiscal needs. Establish a permanent federal liaison officer who reports to the Mayor.

The Federal government should be keenly aware of the vital role played by the City in Soviet military matters for many years. The many sacrifices made by the City and its residents in accommodating the former Soviet navy should be reflected in fair treatment in the post-Soviet period. An on-going City-Moscow liaison would promote adequate treatment by the Federal government in establishing Vladivostok's proper share of Federal tax revenues. The City could also support federal legislation to increase local autonomy and open markets. The City may also wish to seek added federal financial assistance for the substantial costs it continues to bear providing housing and other services to the federal military personnel still remaining in Vladivostok.

The office should also serve as the City's specialists in intergovernmental domestic relations and provide leadership in developing an association of cities. The cities of the region may cooperate in such items as information sharing, joint efforts in lobbying, and many other useful activities.

V. Final Comments

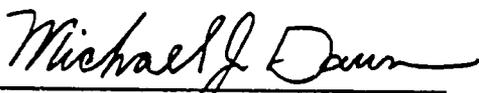
The recommendations presented in this report relate primarily to the Economic Planning Department (EPD), information systems and staff training. We have included our ideas and suggestions in some areas of accounting, finance, budgeting, capital improvements and procurement where these matters are related to the mission of EPD or to the information systems projects.

We believe each of the recommendations should be carefully reviewed by RTI with the idea of implementation in a timely fashion. Should you agree that this road map will lead to sound economic development which is vitally needed to provide jobs and improved quality of life, we are ready to assist you in this effort.

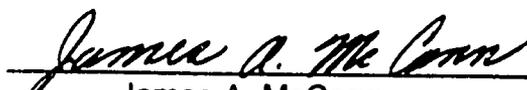
We want to express our appreciation to Jim Alloway for extending himself "above and beyond" to make our short visit to Vladivostok pleasant and productive. He devoted many hours discussing the project with us and shared his thoughts and extensive experience openly and thoroughly. His entire staff was eager to help and did so frequently.

There are real problems to overcome to make Vladivostok a vibrant, thriving city. We believe the city has charm, a unique location and above all, people who want to make it a great city. We are optimistic about its future and would be proud to be part of making it happen.

Finally, we appreciate the opportunity offered by RTI to become part of the MFM project. We wish you complete success in every aspect of the effort.



Michael J. Daun



James A. McCann

List Of Exhibits:

1. List Of Interviews
2. Potential Financing Alternatives
3. Selected Databases Which Could Be Automated For Use By The Economic Planning Department
4. Forms Used To Inventory Current Reports, Data Sources And New Data Needs
5. Sample Work Program, Schedule, And Progress Report Format
6. Training Experiences For Information Systems Department
7. Permitted Local Taxes

EXHIBIT 1

LIST OF INTERVIEWS

1. James Alloway, Resident Project Consultant, RTI
2. Simon Godshev, Director, Krai Tax Inspection Department, Information Systems Division
3. Andrey Naumov, Director, City Information Services Department
4. Mahesh Reddy, International Management Consultants (RTI)
5. Larisa S. Sevastianova, Director, City Department of Economic Planning
6. Natalia I. Sorokoletova, Assistant Director, City Department of Economic Planning
7. Nina Timinskaya, Krai Statistical Committee
8. Sasha, Systems Consultant, RTI.

EXHIBIT 2

POTENTIAL FINANCING ALTERNATIVES

A typical means of attracting substantial investment capital into an area is through a variety of Public - Private Partnerships. What follows are a few of the ways in which successful Public - Private Partnerships have been structured.

1) Total Privatization - The government unit sells the enterprise to a private company or consortium. The private entity retains full ownership and operating rights subject to compliance with contractual provisions with the government (environmental, safety, level of service, etc. requirements).

2) Long Term Operating Lease - Also known as "build, operate and transfer", such arrangements usually require a privately financed consortium to purchase, rebuild or expand a former government enterprise. In exchange, the consortium is allowed to operate the enterprise and retain some or all of the profits generated during the lease term. Ownership rights are retained by the government. Often, the local or state government is a part of the consortium.

3) Equity Partnership - A consortium is formed by a combination of private and local government participants. Typically, the private participants (national, development or investment banks, developers, etc.) contribute most or all of the capital required to restore or build the enterprise facility. In exchange, the government transfers the land and title for the old facility to the consortium. The government is an equity partner in the consortium - often the majority owner. One example of this type of arrangement is the financing of the Prague International Airport Terminal.

4) Securitization - In this alternative the government actually sells shares in an existing government enterprise, then uses the funds raised through the offering to restore or expand the facility. The premise is that the investment of capital back into the enterprise will allow the enterprise to return a profit for its shareholders. This alternative is explored further in Recommendation # 8 related to the Economic Planning Department - creation of a Vladivostok Economic Development Corporation.

EXHIBIT 3 POTENTIAL ECONOMIC PLANNING DEPARTMENT (EPD) DATABASES

DATABASE NAME	CONTENTS	SOURCE	USE(S)
Construction Contracts	All existing and in-process construction contracts involving the City including description, contractor, location, budget, milestones, current (\$+ progress) status, etc.	EPD contracts file containing all executed and in process contracts	To fulfill department responsibility to monitor such contracts. For "Investment Intentions" Report For CIP (future)
Infrastructure	All infrastructure segments (street, sewer, water, etc.) by location including type, location, engineering description, physical condition rating, maintenance record, etc.	City departments responsible for maintaining each type of facility	To set priorities for infrastructure portion of capital budget and Capital Improvement Program
Resident Social/Demographic Census	All Vladivostok households including family size, ages, income(s), etc.	Federal Tax Inspection Department Other?	<ul style="list-style-type: none"> • "Poor Peoples" Program • Housing Policies, etc.
City Financial Operations and Fiscal Trends	Revenue/Expenditure history, Results of Operations of City enterprises for Vladivostok	City Finance Department	<ul style="list-style-type: none"> • Unit Costs for Price Control • Various Reports
Business Statistics & Enterprise Activity	Vladivostok Financial <u>and</u> Operational data <ul style="list-style-type: none"> • Statistical totals of business activity • Company by Company data 	<ul style="list-style-type: none"> • Krai Statistical Department • Other Krai governments? 	<ul style="list-style-type: none"> • City Development Plan • Costing Disasters • Other Reports
Land/Property	<ul style="list-style-type: none"> • Inventory of all land and improvement by parcel - government <u>and</u> private • Physical characteristics, building permits 	<ul style="list-style-type: none"> • Other City Department files • Rion files? 	<ul style="list-style-type: none"> • City Development Plan • Costing Disasters • Other Reports

EXHIBIT 4A

SAMPLE
FORM

INVENTORY OF REPORTS PRODUCED
BY ECONOMIC PLANNING DEPARTMENT AS OF FEBRUARY 15, 1995
(ORGANIZATION) (DATE)

REPORT TITLE	REPORT CONTENTS	PURPOSE OF REPORT	USER(S)	FREQUENCY	COMMENTS (PROBLEMS, ISSUES)
<i>Investment Intentions Report</i>	<i>A list of all City financed capital project proposed for the budget year</i>	<i>The basis for the annual capital budget for City financed projects</i>	<i>Mayor, Rions</i>	<i>November of each year</i>	<i>Doesn't include Krai or financed projects or other non City financed capital projects.</i>

EXHIBIT 4B

SAMPLE
FORM

INVENTORY OF DATA SOURCES USED
BY ECONOMIC PLANNING DEPARTMENT AS OF FEBRUARY 15, 1995
(ORGANIZATION) (DATE)

REPORT TITLE, LIST NAMES, ETC.	CONTENTS AND DESCRIPTION	HOW IS DATA USED BY THE DEPARTMENT	SOURCE OF DATA	FREQUENCY	COMMENTS (PROBLEMS, ISSUES)
<i>Business and Individual Tax Data</i>	<i>Lists of all taxpayers, including amount due, Rupes of production or income taxed</i>	<i>Used to determine business assistance and Poor Peoples Program objectives</i>	<i>City Finance Department Files</i>	<i>Every three months</i>	<i>Could data be transmitted electronically directly from Krai Tax Inspection Department?</i>

EXHIBIT 4C

SAMPLE
FORM

LIST OF NEW DATA NEEDS OF
BY ECONOMIC PLANNING DEPARTMENT AS OF FEBRUARY 15, 1995
(ORGANIZATION) (DATE)

TYPE OF INFORMATION NEEDED	SPECIFIC RECORDS/DATA NEEDED	HOW WOULD INFORMATION BE USED?	FREQUENCY NEEDED	COMMENTS
<i>Up-to-date Household Socio-economic data</i>	<i>Household family size, income, employment status. employer(s) and age statistical totals by Rion subdivision</i>	<i>Used to evaluate current progress of Poor Peoples Program and possible future emphasis</i>	<i>Every 3 to 6 months</i>	<i>Up-to-date data could be made available from Krai Statistical Committee - possibly electronically</i>

GOOD WORK PLANS

- . WORK ASSIGNMENTS BASED ON INDIVIDUALS' SKILLS
- . SMALLEST UNITS OF WORK REQUIRE AN ESTIMATED 5 DAYS OR LESS
- . ESTIMATES MADE BY EXPERIENCED PERSONNEL
- . USE WORK PLAN GUIDELINES
- . INCLUDE REVIEW POINTS WITH MILESTONE PRODUCTS
- . INCLUDE DELIVERABLES (MEMORANDA, INTERIM REPORTS) AT INTERMEDIATE POINTS IN PROJECT
- . LEAD TO THE PRODUCTION OF FINAL PROJECT DELIVERABLES

EXHIBIT 5
SAMPLE WORK PROGRAM, SCHEDULE
AND PROGRESS REPORT FORMAT

SAMPLE

DETERMINE THE REQUIREMENTS FOR CENTRALIZED ATTORNEY SCHEDULING

WORK PLAN

I, II, III, etc., - Work Phases

Date May 1, 1995

1., 2., 3., etc., - Work Tasks

Prepared by R. Jones

<u>Description</u>	<u>Assigned To</u>	<u>Estimated Man-Hours</u>	<u>Start Date</u>	<u>Complete Date</u>
I. PERFORM HIGH-SPOT REVIEW:				
1. Contact all agencies, including all municipal courts, courts of common pleas, courts of appeals, to determine which agencies wish to participate. Schedule visits to each of the agencies participating in the project.	L. Smith	16		
2. Review each agency and interview the following personnel; judge, clerk, baliff, others involved in scheduling, as required. In each agency; document present methods, estimate personnel requirements and other costs, and record any problems.	L. Smith R. Jones	40 40		
3. Visit two other agencies from other counties which are presently performing centralized scheduling.	L. Smith R. Jones	32 32		
4. Interview executive directors and chairmen of court related committees and the President of the Bar Association for ideas and comments.	R. Jones	8		

	Phase I Total	168		

EXHIBIT 5 - CONTINUED

EVALUATE PROGRESS

DETERMINE THE REQUIREMENTS FOR ATTORNEY SCHEDULING

MAN-HOUR SUMMARY

JUNE 12 THROUGH JUNE 25, 1995 (TWO WEEKS)

SAMPLE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Assigned to	Man- Hours This Period	Man- Hours to Date	Estimate to Complete	New Estimate	Planned Man- Hours	Over (Under) Plan
I. PERFORM HIGH-SPOT REVIEW	R. Jones	28	76	10	86	80	6
	L. Smith	30	86	6	92	88	4
II. DEFINE SCOPE AND OBJECTIVES FOR THE DESIGN PROJECT	R. Jones	22	22	-	22	24	(2)
III. DEVELOP PLAN FOR THE DESIGN PROJECT	L. Smith	36	36	40	76	64	12
IV. REVIEW AND APPROVAL	R. Jones	-	-	40	40	40	-
V. ADMINISTRATION	R. Jones	14	38	16	54	56	(2)
	L. Smith	6	22	8	30	32	(2)
Totals	R. Jones	64	136	66	202	200	2
	L. Smith	72	144	54	198	184	14
		136	280	120	400	384	16
		===	===	===	===	===	==

EXHIBIT 5 - CONTINUED

EXHIBIT 6

INFORMATION SERVICES DEPARTMENT TRAINING

TYPE OF TRAINING	TRAINING PURPOSE	EXAMPLE	TRAINEES	TRAINING METHODS/VENUES
Workstation/Micro-computer Operating System	To understand how to manage program and data files on microcomputer. Also controls program execution.	Microsoft "DOS" or "Windows"	All ISD professional staff	<ul style="list-style-type: none"> DOS Manuals and/or 1 - 3 day classes available in U.S.
Network Management and Support	To understand how to properly design, operate and support LAN network	Novell - "Netware", UNIX	ISD Director, at least one ISD staff ¹	<ul style="list-style-type: none"> Vendor Training Classes 3 - 4 days Reach for introduction and advanced classes Purchased software tutorials "Self teach" manuals Publications (Example: LAN Times; McGraw Hill)
Network Database Software	To learn how to design and maintain network databases resident on network server	Oracle System - "Oracle"	All ISD staff	<ul style="list-style-type: none"> Software documentation Tutorials Vendor training classes of user department
Report Generator Software for Networks	To understand how and when to use this software for custom reporting needs	Microsoft - "Access"	All ISD staff and heavy department users	<ul style="list-style-type: none"> Primarily software, documentation and experimentation
Large System Applications Software	To understand operation, maintenance and support user department application requirements	AMS - "LGFS" System	Assigned ISD or other City application analysts (at least 2)	<ul style="list-style-type: none"> City On-site vendor training, User and technical manuals Visit to another LGFS site

¹ User departments' systems analyst must also be trained if user department is responsible for maintaining its own network.

EXHIBIT 7

PERMITTED LOCAL TAXES

1. Retail Licenses Fees
2. People & Enterprises Special Fees
3. Advertisement Taxes
4. Car & Computer Resale Tax
5. Dog License Fees
6. Liquor License Fees
7. Auction & Lottery License Fees
8. Apartment Title Deed Fees
9. Parking Fees
10. Oblast Official Seal Usage Fees
11. Horse Racing License Fees
12. Horse Race Winning Fees
13. Horse Race Entrance Fees
14. Stock Trading Commissions
15. Movie Production Fees
16. District Cleaning Fees
17. Gambling Establishment License
18. Soci-Cultural, Housing Support Tax
19. Excise Goods Trading License

Source: Mahesh Reddy, RTI consultant from "Regional Finance Department".