

05/03/99

Rob McKenna
Pete von Reichbauer
Louise Miller
Greg Nickels
Jane Hague

pj
Clerk 05/13/99
pj sub 06/16/99

Introduced By:

Proposed No.:

1999-0287

MOTION NO. 10716

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A MOTION appointing the members of an expert review panel to further study unresolved technical, economic, and policy issues not addressed by the conditional transfer of franchise from TCI to AT&T as adopted in Ordinance 13409 and authorizing the chair of the council to enter into a contract for consultant services to staff and facilitate the deliberations of the expert review panel and to prepare the panel's report for presentation to the council.

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WHEREAS, King County approved Ordinance 13409 that approved the conditional transfer of the control of franchises and commitment held by TCI Cablevision of Washington, Inc. under franchise 12132 and Tele-vue Systems, Inc. d/b/a/TCI of Washington and TCI Pacific, Inc. under franchise 11680 to AT&T Corporation, and

WHEREAS, Ordinance 13409, Section 6, created an expert review panel (ERP) to be composed of regulatory economists and engineers who are considered experts in the industry, and

WHEREAS, a council committee comprised of both council members and council staff shall receive, review and select the members of the ERP from nominations made by the stakeholders and the franchises, and

WHEREAS, the ERP shall consist of eight members, and

1 WHEREAS, the ERP will issue a report addressing any anti-competitive
2 implications of offering bundled high speed cable modem Internet services including legal,
3 technical, and economic considerations as well as subscriber privacy issues, and

4 WHEREAS, the council directed staff to prepare and issue a request for proposal
5 (RFP) to hire a consultant to staff and facilitate the deliberations of the ERP and to prepare
6 the panel's report for presentation to council by October 8, 1999, and

7 WHEREAS, funding has already been identified for this purpose in Ordinance
8 13512, and

9 WHEREAS, after sending out the RFP, a technical evaluation committee
10 comprised of council staff determined that the response of Ernest S. Ting met all the
11 required criteria of the RFP, and

12 WHEREAS, a contract for \$96,000 dollars which includes monthly status reports,
13 necessary communications for the efficient operation of the panel, review with the lead
14 analyst to review project progress on a semi-weekly basis, and a draft and final written
15 report containing the findings, analysis, conclusions and recommendations of the ERP, has
16 been negotiated with Ernest S. Ting and Associates;

17 NOW, THEREFORE, BE IT MOVED by the Council of King County:

18 The ERP shall consist of the following members: William Anderson, Ron Johnson,
19 Sharon Nelson, Roger Noll, Ralph Sims, Martin Rood, Jeffrey Sterling and Rick White,
20 and

21 The chair of the metropolitan King County council is authorized to enter into a
22 contract, substantially in the form attached, in an amount not to exceed ninety-six thousand
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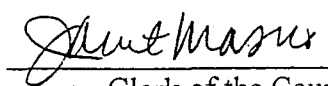
1 dollars with Ernest S. Ting and Associates for the staffing and facilitation of deliberations
2 among the expert review panel and for the preparation of the panel's report for presentation
3 to council by October 8, 1999.

4 PASSED by a vote of 13 to 0 this 21st day of June, 1999.

5 KING COUNTY COUNCIL
6 KING COUNTY, WASHINGTON

7 
8 Chair

9 ATTEST:

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11 ~~Deputy~~ Clerk of the Council

12 Attachments: Contract

10716

CONTRACT NO.	<u>T00869T</u>	DEPARTMENT	<u>Council</u>
FEDERAL TAXPAYER I.D.	<u>138441414</u>	CONSULTANT	<u>Ernest S. Ting and Associates</u>
SERVICES PROVIDED	<u>Telecommunications and Technology Consultant</u>		
AMOUNT \$ 96,000		FUND	<u>Current Expense Fund</u>
		SOURCE	
DURATION	<u>June 23, 1999</u>	TO	<u>December 31, 1999</u>

CONTRACT FOR NON-PROFESSIONAL/TECHNICAL CONSULTANT SERVICES - 1999

THIS CONTRACT is entered into by KING COUNTY (the "County"), and Ernest S. Ting and Associates (the "Consultant") , whose address is 3800 Monterey Boulevard, Oakland, California 94619-1550. The County is undertaking certain activities related to oversight of the conditioned approval merger of TCI and AT&T which included the establishment of an Expert Review Panel to consider the unresolved technical, economic and policy issues related to the conditioned approval, and the County desires to engage the Consultant to render certain non-professional/technical services in connection with such undertakings of the County,

NOW, THEREFORE, in consideration of payments, covenants, and agreements hereinafter mentioned, to be made and performed by the parties hereto, the parties covenant and do mutually agree as follows:

I. SCOPE OF SERVICES

The Consultant shall provide services and comply with the requirements set forth hereinafter and in the following attached exhibits which are incorporated herein by reference:

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|--------------------------|--------------------------------------------------|----------------------------|----------|
| <input type="checkbox"/> | <u>Scope of Services</u> | Attached hereto as Exhibit | <u>A</u> |
| <input type="checkbox"/> | <u>RFP No. 122-99KJF</u> | Attached hereto as Exhibit | <u>B</u> |
| <input type="checkbox"/> | <u>Response to RFP</u> | Attached hereto as Exhibit | <u>C</u> |
| <input type="checkbox"/> | <u>Consultant Disclosure Form (K.C.C. 3.04)</u> | Attached hereto as Exhibit | <u>D</u> |
| <input type="checkbox"/> | <u>Personnel Inventory Report (K.C.C. 12.16)</u> | Attached hereto as Exhibit | <u>E</u> |
| <input type="checkbox"/> | <u>Affidavit of Compliance (K.C.C. 12.16)</u> | Attached hereto as | <u>F</u> |

<input type="checkbox"/>	Disability Assurance of Compliance/Section 504	Exhibit Attached hereto as Exhibit	G
<input type="checkbox"/>		Attached hereto as Exhibit	
<input type="checkbox"/>	Waiver of Certificate(s) of Insurance	Attached hereto as Exhibit	H
<input type="checkbox"/>	General Provisions	Attached hereto as Exhibit	I
<input type="checkbox"/>		Attached hereto as Exhibit	
<input type="checkbox"/>		Attached hereto as Exhibit	

10716

II. DURATION OF CONTRACT

This Contract shall commence on the 23rd day of June, 1999 and shall terminate on the 31st day of December, 1999, unless extended or terminated earlier, pursuant to the terms and conditions of the Contract.

III. COMPENSATION AND METHOD OF PAYMENT

- A. The County shall reimburse the Consultant for satisfactory completion of the services and requirements specified in this Contract in the amount of \$96,000, payable as described in Exhibit I General Provisions – Compensation and Method of Payment.
- B. The Consultant shall submit an invoice upon the completion of Phases I, III and IV and the completion of each Monthly Status Report in Phase II. Except as otherwise provided in this Section and Section IV, such invoices shall be payable within 45 days of receipt by the County's Technical Representative.
- C. The Consultant shall submit its final invoice and such other documents as are required pursuant to this Contract to the County's Technical Representative within ten (10) calendar days of completion of the Scope of Services. Unless waived by the County in writing, failure by the Consultant to submit the final invoice and required documents will relieve the County from any and all liability for payment to the Consultant for the amount set forth in such invoice or any subsequent invoice.
- D. If the Consultant fails to comply with any terms or conditions of this Contract or to provide in any manner the work or services agreed to herein, the County may withhold any payment due the Consultant until the County is satisfied that corrective action, as specified by the County, has been completed. This right is in addition to and not in lieu of the County's right to terminate this Contract as provided in Section IV below.

IV. TERMINATION

- A. This Contract may be terminated by the County without cause, in whole or in part, upon providing the Consultant ten (10) calendar days' advance written notice of the termination.

If the Contract is terminated as in Section IV, paragraph A: (1) the County will be liable only for payment in accordance with the terms of this Contract for

services rendered prior to the effective date of termination; and (2) the Consultant shall be released from any obligation to provide further services pursuant to the Contract.

- B. The County may immediately terminate this Contract, in whole or in part, upon written notice in the event: (1) the Consultant materially breaches any duty, obligation, or services required pursuant to this Contract, and (2) the County exhausts the procedure for corrective action described in Section VII.

If the Contract is terminated by the County pursuant to this Subsection IV(B), the Consultant shall be liable for damages, including any additional costs of procurement of similar services from another source.

If the termination results from acts or omissions of the Consultant, including but not limited to misappropriation, nonperformance of required services or fiscal mismanagement, the Consultant shall return to the County immediately any funds, misappropriated or unexpended, which have been paid to the Consultant by the County.

- C. If expected or actual funding is withdrawn, reduced or limited in any way prior to the termination date set forth above in Section II or in any amendment hereto, the County may, upon written notice to the Consultant, immediately terminate this Contract in whole or in part.

If the Contract is terminated as in Section IV, paragraph C: (1) the County will be liable only for payment in accordance with the terms of this Contract for services rendered prior to the effective date of termination; and (2) the Consultant shall be released from any obligation to provide further services pursuant to the Contract.

Funding under this Contract beyond the current appropriation year is conditional upon appropriation by the County Council of sufficient funds to support the activities described in this Contract. Should such an appropriation not be approved, this contract will terminate at the close of the current appropriation year.

- D. Inability of the Consultant to comply with terms and conditions of this Contract, or to provide any work or services pursuant to this Contract, as a result of acts or omissions of the County, or of acts or omissions of the Expert Review Panel which are beyond the control of the Consultant shall not be considered a breach pursuant to Section IV, paragraph B.
- E. Nothing herein shall limit, waive, or extinguish any right or remedy provided by this Contract or law that either party may have in the event that the obligations, terms and conditions set forth in this Contract are breached by the other party.

V. MAINTENANCE OF RECORDS

- A. The Consultant shall maintain accounts and records, including personnel, property, financial, and programmatic records and other such records as may be deemed necessary by the County to ensure proper accounting for all contract funds and compliance with this Contract. All such records shall sufficiently and properly reflect all direct and indirect costs of any nature expended and services provided in the performance of this Contract.
- B. These records shall be maintained for a period of six (6) years after termination hereof unless permission to destroy them is granted by the Office of the Archivist in accordance with RCW Chapter 40.14, or unless a longer retention period is required by law.

VI. TECHNICAL DIRECTION

The County shall provide general guidance and direction in connection with the Scope of Services to be performed under this Contract. The County's Technical Representative shall be Rebecha Cusack, who is designated to receive Contract deliverables and to handle Consultant's performance-related and contractual inquiries.

VII. CORRECTIVE ACTION

If the County determines that a breach of contract has occurred, that the Consultant has failed to comply with any terms or conditions of this Contract or the Consultant has failed to provide in any manner the work or services agreed to herein, and if the County deems said breach to warrant corrective action, the following sequential procedure will apply:

- A. The County will notify the Consultant in writing of the nature of the breach;
- B. The Consultant shall respond in writing within three (3) working days of its receipt of such notification, which response shall indicate the steps being taken to correct the specified deficiencies. The corrective action plan shall specify the proposed completion date for bringing the Contract into compliance, which date shall not be more than ten (10) days from the date of the Consultant's response; unless the County, at its sole discretion, specifies in writing an extension in the number of days to complete the corrective actions;
- C. The County will notify the Consultant in writing of the County's determination as to the sufficiency of the Consultant's corrective action plan. The determination of sufficiency of the Consultant's corrective plan shall be at the sole discretion of the County;

- D. In the event that the Consultant does not respond within the appropriate time with a corrective action plan, or the Consultant's corrective action plan is determined by the County to be insufficient, the County may commence termination of this Contract in whole or in part pursuant to Section IV.B;
- E. In addition, the County may withhold any payment owed the Consultant or prohibit the Consultant from incurring additional obligations of funds until the County is satisfied that corrective action has been taken or completed; and
- F. Nothing herein shall be deemed to affect or waive any rights the parties may have pursuant to Section IV, Subsections A, B, C, and D.

VIII. AUDITS

- A. The records and documents with respect to all matters covered by this Contract shall be subject at all times to inspection, review or audit by the County and/or federal/state officials so authorized by law during the performance of this Contract and six (6) years after termination hereof.
- B. The Consultant shall provide right of access to its facilities, including those of any subconsultant, to the County, the state and/or federal agencies or officials at all reasonable times in order to monitor and evaluate the services provided under this Contract. The County will give advance notice to the Consultant in the case of fiscal audits to be conducted by the County.
- C. The Consultant agrees to cooperate with the County or its agent in the evaluation of the Consultant's performance under this Contract and to make available all information reasonably required by any such evaluation process. The results and records of said evaluations shall be maintained and disclosed in accordance with RCW Chapter 42.17.
- D. If the Consultant receives a total of \$25,000 or more in federal financial assistance during its fiscal year, from the County, and is a non-profit organization or institution of higher learning or a hospital affiliated with an institution of higher learning, and is, under this contract, carrying out or administering a program or portion of a program, it shall have an independent audit conducted of its financial statement and condition, which shall comply with the requirements of GAAS (generally accepted auditing standards), GAO's Standards for Audits of Governmental Organizations, Programs, Activities and Functions and OMB Circulars A-133 and A-128, as amended and as applicable. Consultants receiving federal funds from more than one County department or division shall be responsible for determining if the combined financial assistance is equal to or greater than \$25,000. The Consultant shall provide one copy of the audit report to each County division providing federal financial assistance to the Consultant no later than six (6) months subsequent to the end of the Consultant's fiscal year.

IX. ASSIGNMENT/SUBCONTRACTING

A. The Consultant shall not assign or subcontract any portion of this Contract or transfer or assign any claim arising pursuant to this Contract without the written consent of the County. Said consent must be sought in writing by the Consultant not less than fifteen (15) calendar days prior to the date of any proposed assignment.

B. "Subcontract" shall mean any agreement between the Consultant and a Subcontractor or between Subcontractors that is based on this Contract, provided that the term "subcontract" does not include the purchase of (i) support services not related to the technical subject matter of this contract, or (ii) supplies.

X. HOLD HARMLESS AND INDEMNIFICATION

A. In providing services under this Contract, the Consultant is an independent contractor, and neither the Consultant nor its officers, agents or employees are employees of the County for any purpose. The Consultant shall be responsible for all federal and/or state tax, industrial insurance and Social Security liability that may result from the performance of and compensation for these services and shall make no claim of career service or civil service rights which may accrue to a County employee under state or local law.

The County assumes no responsibility for the payment of any compensation, wages, benefits, or taxes by or on behalf of the Consultant, its employees and/or others by reason of this Contract. The Consultant shall protect, indemnify and save harmless the County and its officers, agents and employees from and against any and all claims, costs, and/or losses whatsoever occurring or resulting from (1) the Consultant's failure to pay any such compensation, wages, benefits or taxes; and/or (2) the supplying to the Consultant of work, services, materials, and/or supplies by Consultant employees or other suppliers in connection with or in support of the performance of this Contract.

B. The Consultant further agrees that it is financially responsible for and will repay the County all indicated amounts following an audit exception which occurs due to the negligence, intentional act and/or failure for any reason to comply with the terms of this Contract by the Consultant, its officers, employees, agents, and/or representatives. This duty to repay shall not be diminished or extinguished by the prior termination of the Contract pursuant to the Duration of Contract, or the Termination section.

C. The Consultant shall protect, defend, indemnify, and save harmless the County, [and the State of Washington (when any funds for this Contract are provided by the State of Washington)], their officers, employees, and agents from any and all

costs, claims, judgments, and/or awards of damages, arising out of or in any way resulting from the negligent acts or omissions of the Consultant, its officers, employees, and/or agents. The Consultant agrees that its obligations under this subparagraph extend to any claim, demand, and/or cause of action brought by or on behalf of any of its employees, or agents. For this purpose, the Consultant, by mutual negotiation, hereby waives, as respects the County only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. In the event the County incurs attorney fees and/or costs in the defense of claims, for damages within the scope of this section, such fees and costs shall be recoverable from the Consultant. In addition King County shall be entitled to recover from the Consultant fees, and costs incurred to enforce the provisions of this section.

Claims shall include, but not be limited to, assertions that the use or transfer of any software, book, document, report, film, tape, or sound reproduction or material of any kind, delivered hereunder, constitutes an infringement of any copyright, patent, trademark, trade name, and/or otherwise results in unfair trade practice.

Nothing contained within this provision shall affect and/or alter the application of any other provision contained within this agreement.

XI. INSURANCE REQUIREMENTS

- A. By the date of execution of this Contract, the Consultant shall procure and maintain for the duration of this Contract, insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of work hereunder by the Consultant, its agents, representative, employees, and/or subcontractors. The cost of such insurance shall be paid by the Consultant or subcontractor. The Consultant may furnish separate certificates of insurance and policy endorsements for each subcontractor as evidence of compliance with the insurance requirements of this Contract.

For All Coverages:

Each insurance policy shall be written on an "occurrence" form; excepting that insurance for professional liability, errors and omissions when required, may be acceptable on a "claims made" form.

If coverage is approved and purchased on a "claims made" basis, the Consultant warrants continuation of coverage, either through policy renewals or the purchase of an extended discovery period, if such extended coverage is available, for not less than three years from the date of completion of the work which is the subject of this Contract.

By requiring such minimum insurance coverage, the County shall not be deemed or construed to have assessed the risks that may be applicable to the Consultant under this contract. The Consultant shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

Nothing contained within these insurance requirements shall be deemed to limit the scope, application and/or limits of the coverage afforded, which coverage will apply to each insured to the full extent provided by the terms and conditions of the policy(s). Nothing contained within this provision shall affect and/or alter the application of any other provision contained within this Agreement.

B. Minimum Scope Of Insurance

Coverage shall be at least as broad as:

1. General Liability:

Insurance Services Office form number (CG 00 01 Ed. 11-88) covering **COMMERCIAL GENERAL LIABILITY.**

2. Professional Liability:

Professional Liability, Errors and Omissions coverage.

In the event that services delivered pursuant to this Contract either directly or indirectly involve or require professional services, Professional Liability, Errors and Omissions coverage shall be provided. "Professional Services", for the purpose of this Contract section shall mean any services provided by a licensed professional.

3. Automobile Liability:

Insurance Services Office form number (CA 00 01 Ed. 12-90) covering **BUSINESS AUTO COVERAGE,** symbol 1 "any auto"; or the combination of symbols 2, 8, and 9.

4. Workers' Compensation:

Workers' Compensation coverage, as required by the Industrial Insurance Act of the State of Washington.

5. Employers Liability or "Stop-Gap":

The protection provided by the Workers Compensation policy Part 2 (Employers Liability) or, in states with monopolistic state funds, the

protection provided by the
General Liability policy.

“Stop Gap” endorsement to the

C. Minimum Limits Of Insurance

The Consultant shall maintain limits no less than, for:

1. General Liability: ~~\$1,000,000~~ combined single limit per occurrence for bodily injury, personal injury and property damage, and for those policies with aggregate limits, a \$2,000,000 aggregate limit.
2. Professional Liability, Errors and Omissions: \$ NA _____
3. Automobile Liability: \$ NA _____ combined single limit per accident for bodily injury and property damage.
4. Workers' Compensation: Statutory requirements of the State of residency.
5. Employers Liability or “Stop Gap” coverage: \$ 1,000,000 _____

D. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to, and approved by, the County. The deductible and/or self-insured retention of the policies shall not limit or apply to the Consultant's liability to the County and shall be the sole responsibility of the Consultant.

E. Other Insurance Provisions

The insurance coverage(s) required in this Contract are to contain, or be endorsed to contain the following provisions:

1. General and Automobile Liability Policy(s):
 - a. The County, its officers, officials, employees and agents are to be covered as additional insureds as respects liability arising out of activities performed by or on behalf of the Consultant in connection with this Contract.
 - b. To the extent of the Consultant's negligence, the Consultant's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and agents. Any insurance and/or self-insurance maintained by the County, its officers, officials, employees or agents shall not contribute with the Consultant's insurance or benefit the Consultant in any way.

- c. The Consultant's insurance coverage shall apply separately to each insured against whom a claim is made and/or lawsuit is brought, except with respect to the limits of the insurer's liability.

2. All Policies:

- a. Coverage shall not be suspended, voided, canceled, reduced in coverage or in limits, except by the reduction of the applicable aggregate limit by claims paid, until after forty-five (45) calendar days prior written notice, has been given to the County.

F. Acceptability of Insurers

Unless otherwise accepted by the County,

Insurance coverage is to be placed with insurers with a Bests' rating of no less than A:VIII, or, if not rated with Bests', with minimum surpluses the equivalent of Bests' surplus size VIII.

Professional Liability, Errors and Omissions insurance coverage may be placed with insurers with a Bests' rating of B+:VII. Any exception must be approved by the County.

If at any time of the foregoing policies shall be or become unsatisfactory to the County, as to form or substance, or if a company issuing any such policy shall be or become unsatisfactory to the County, the Consultant shall, upon notice to that effect from the County, promptly obtain a new policy, and shall submit the same to the County, with the appropriate certificates and endorsements, for approval.

G. Verification of Coverage

The Consultant shall furnish the County with certificates of insurance and endorsements required by this Contract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements for each insurance policy are to be on forms approved by the County and are to be received and approved by the County prior to the commencement of activities associated with the Contract. The County reserves the right to require complete, certified copies of all required insurance policies at any time.

H. Subcontractors

The Consultant shall include all subcontractors as insureds under its policies, or shall furnish separate certificates of insurance and policy endorsements from each subcontractor. Insurance coverages provided by subcontractors as evidence

of compliance with the insurance requirements of this Contract shall be subject to all of the requirements stated herein.

XII. CONFLICT OF INTEREST

King County Code Chapter 3.04 is incorporated by reference as if fully set forth herein and the Consultant agrees to abide by all the conditions of said Chapter. Failure by the Consultant to comply with any requirements of this Chapter shall be a material breach of contract.

- A. The Consultant covenants that no officer, employee, or agent of the County who exercises any functions or responsibilities in connection with the planning and implementation of the scope of services funded herein, or any other person who presently exercises any functions or responsibilities in connection with the planning and implementation of the scope of services funded herein shall have any personal financial interest, direct or indirect, in this Contract. The Consultant shall take appropriate steps to assure compliance with this provision.
- B. If the Consultant violates the provisions of Subsection XI(A) or does not disclose other interest required to be disclosed pursuant to King County Code Section 3.04.120, as amended, the County will not be liable for payment of services rendered pursuant to this Contract. Violation of this Section shall constitute a substantial breach of this Contract and grounds for termination pursuant to Section IV(B) above as well as any other right or remedy provided in this Contract or law.

XIII. NONDISCRIMINATION

- A. King County Code Chapters 12.16 and 12.18 are incorporated by reference as if fully set forth herein and such requirements apply to this Contract; provided however, that no specific levels of utilization of minorities and women in the workforce of the Consultant shall be required, and the Consultant is not required to grant any preferential treatment on the basis of race, sex, color, ethnicity or national origin in its employment practices; and provided further that, notwithstanding the foregoing, any affirmative action requirements set forth in any federal regulations, statutes or rules included or referenced in the contract documents shall continue to apply.
- B. During the performance of this Contract, neither the Consultant nor any party subcontracting under the authority of this Contract shall discriminate nor tolerate harassment on the basis of race, color, sex, religion, nationality, creed, marital status, sexual orientation, age, or the presence of any sensory, mental, or physical disability in the employment or application for employment or in the administration or delivery of services or any other benefits under this Contract.

The Consultant shall comply fully with all applicable federal, state and local laws, ordinances, executive orders and regulations which prohibit such discrimination. These laws include, but are not limited to, RCW Chapter 49.60 and Titles VI and VII of the Civil Rights Act of 1964.

- C. During the performance of this Contract, neither the Consultant nor any party subcontracting under the authority of this Contract shall engage in unfair employment practices. It is an unfair employment practice for any:
1. Employer or labor organization to discriminate against any person with respect to referral, hiring, tenure, promotion, terms, conditions, wages or other privileges of employment;
 2. Employment agency or labor organization to discriminate against any person with respect to membership rights and privileges, admission to or participation in any guidance program, apprenticeship training program, or other occupational training program;
 3. Employer, employment agency, or labor organization to print, circulate, or cause to be printed, published or circulated, any statement, advertisement, or publication relating to employment or membership, or to use any form of application therefor, which indicates any discrimination unless based upon a bona fide occupational qualification;
 4. Employment agency to discriminate against any person with respect to any reference for employment or assignment to a particular job classification;
 5. Employer, employment agency or a labor organization to retaliate against any person because this person has opposed any practice forbidden by KCC Chapter 12.18 or because that person has made a charge, testified or assisted in any manner in any investigation, proceeding or hearing initiated under the provisions of KCC Chapter 12.18;
 6. Publisher, firm, corporation, organization or association printing, publishing or circulating any newspaper, magazine or other written publication to print or cause to be printed or circulated any advertisement with knowledge that the same is in violation of KCC Chapter 12.18.030C., or to segregate and separately designate advertisements as applying only to men and women unless such discrimination is reasonably necessary to the normal operation of the particular business, enterprise or employment, unless based upon a bona fide occupational qualification; and/or
 7. Employer to prohibit any person from speaking in a language other than English in the workplace unless:
 - a. The employer can show that requiring that employees speak English at certain *times* is justified by business necessity, and
 - b. The employer informs employees of the requirement and the consequences of violating the rule.

D. Reporting

1. The Consultant entering into a contract or agreement with King County valued at \$25,000 or more shall submit to the County Executive a total personnel inventory report providing employment data for minorities, females, and persons with disabilities.

The Consultant shall complete the employment profile form provided by the County and attach the completed form to this Contract. Subject to the provisions of KCC Chapter 12.16.060, the Consultant's personnel inventory report shall be effective for two years after the date on which the report was submitted.

2. The Consultant entering into a contract with King County valued at more than \$25,000, contracts which in the aggregate have a value to the Consultant of more than \$25,000 should submit an affidavit of compliance in the form provided by the County, demonstrating commitment to comply with the provisions of KCC Chapter 12.16 in accordance with paragraph A of this Section XV.

The Consultant shall complete the affidavit of compliance provided by the County and attach the original, notarized, completed form to this Contract. Subject to the provisions of KCC Chapter 12.16.060, the Consultant's affidavit of compliance shall be effective for two years after the date on which the report was submitted.

If the Consultant engages in unfair employment practices as defined above, remedies as set forth in KCC Chapter 12.18 shall be applied.

The Consultant will complete all reports and forms (including Department of Social and Health Services non-discrimination forms, where applicable) provided by the County and will otherwise cooperated fully with the County in monitoring and assisting the Consultant in providing nondiscriminatory programs.

XIV. SECTION 504 AND AMERICANS WITH DISABILITIES ACT

The Consultant has complete a Disability Self-Evaluation Questionnaire for all programs and services offered by the Consultant (including any services not subject to this Contract); and has evaluated its services, programs and employment practices for compliance with Section 504 of the Rehabilitation Act of 1973, as amended, ("504") and the Americans with Disabilities Act ("ADA"). The Consultant has prepare a Corrective Action Plan for the structural, programmatic, and/or service changes necessary at each of its premises within the State of Washington to comply with 504 and the ADA, and it is attached as an exhibit to this Contract and incorporated herein by reference.

XV. NONDISCRIMINATION IN SUBCONTRACTING PRACTICES

- A. In accordance with the provisions of Washington Initiative 200, no County Minority and Women Business (M/WBE) utilization requirements shall apply to this Contract. No

minimum level of M/WBE subcontractor participation or purchase from M/WBE certified vendors is required and no preference will be given by the County to a bidder or proposer for their M/WBE utilization or M/WBE status. Provided, however, that any affirmative action requirements set forth in any federal regulations or statutes included or referenced in the Contract documents will continue to apply.

- B. During the term of this Contract, the Consultant shall not create barriers to open and fair opportunities for M/WBEs to participate in all County contracts and to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subcontractors and suppliers, the Consultant shall not discriminate against any person on the basis of race, color, creed, religion, sex, age, nationality, marital status, sexual orientation or the presence of any mental or physical disability in an otherwise qualified disabled person.
- C. The Consultant shall maintain, until at least twelve (12) months after completion of all work under this contract, records and information necessary to document its level of utilization of M/WBEs and other businesses as subcontractors and suppliers in this contract and in its overall public and private business activities. The Consultant shall also maintain, until twelve (12) months after completion of all work under this contract, all written quotes, bids, estimates or proposals submitted to the Consultant by all businesses seeking to participate in this Contract. The Consultant shall make such documents available to the County for inspection and copying upon request. If this contract involves federal funds, Consultant shall comply with all record keeping requirements set forth in any federal rules, regulations or statutes included or referenced in the contract documents.
- D. King County encourages the utilization of minority owned businesses ("MBEs") and women-owned businesses ("WBEs")(collectively, "M/WBEs") in County contracts. The County encourages the following practices to open competitive opportunities for M/WBEs:
- Attending a pre-bid or pre-solicitation conference, if scheduled by the County, to provide project information and to inform M/WBEs of contracting and subcontracting opportunities.
 - Placing all qualified small businesses attempting to do business in King County, including M/WBEs, on solicitation lists, and providing written notice of subcontracting opportunities to M/WBEs and all other small businesses capable of performing the work, including without limitation all businesses on any list provided by the County, in sufficient time to allow such businesses to respond to the written solicitations.
 - Breaking down total requirements into smaller tasks or quantities, where economically feasible, in order to permit maximum participation by small businesses including M/WBEs.
 - Establishing delivery schedules, where the requirements of this contract permit, that encourage participation by small businesses, including M/WBEs.
 - Providing M/WBEs that express interest with adequate and timely information about plans, specifications, and requirements of the contract.

- Utilizing the services of available minority community organizations, minority contractor groups, local minority assistance offices, the County, and other organizations that provide assistance in the recruitment and placement of M/WBEs.

E. Any violation of the mandatory requirements of the provisions of this Section shall be a material breach of contract for which the Consultant may be subject to damages and sanctions provided for by contract and by applicable law.

XVI. PROPRIETARY RIGHTS

The parties to this Contract hereby mutually agree that if any patentable or copyrightable material or article should result from the work described herein, all rights accruing from such material or article shall be the sole property of the County. The foregoing shall not apply to existing training materials, consulting aids, check lists and other materials and documents of the Consultant which are modified for use in the performance of this Contract.

XVII. KING COUNTY RECYCLED PRODUCT PROCUREMENT POLICY

It is the policy of King County to use recycled materials to the maximum extent practicable (King County Code Chapter 10.16). Consultants able to supply products containing recycled materials which meet performance requirements are encouraged to offer them in bids and proposals and to use them wherever possible in fulfillment of contracts.

The Consultant shall use recycled paper for the production of all printed and photocopied documents related to the fulfillment of this Contract and shall ensure that, whenever possible, the cover page of each document printed on recycled paper bears an imprint identifying it as recycled paper.

If the cost of recycled paper is more than fifteen percent higher than the cost of non-recycled paper, the Consultant may notify the Contract Administrator, who may waive the recycled paper requirement.

The Consultant shall use both sides of paper sheets for copying and printing and shall use recycled/recyclable products wherever practical in the fulfillment of this Contract.

XVIII. ENTIRE CONTRACT/WAIVER OF DEFAULT

The parties agree that this Contract is the complete expression of the terms hereto and any oral or written representations or understandings not incorporated herein are excluded. Both parties recognize that time is of the essence in the performance of the provisions of this Contract. Waiver of any default shall not be deemed to be a waiver of any subsequent default. Waiver

of breach of any provision of the Contract shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the Contract unless stated to be such through written approval by the County, which shall be attached to the original Contract.

XIX. NOTICES

Whenever this Contract provides for notice to be provided by one party to another, such notice shall be in writing and delivered by certified mail.

Any time within which a party must take some action shall be computed from the date that the notice is received by said party.

XX. CONTRACT AMENDMENTS

Either party may request changes to this contract. Proposed changes which are mutually agreed upon shall be incorporated by written amendments to this contract.

COUNTY:

CONSULTANT:

_____ for
Signature - King County Council

Signature

LOUISE MILLER
Name (Please type or print)

ERNEST S. TING
Name (Please type or print)

KING COUNTY COUNCIL CHAIR
Title (Please type or print)

PRINCIPAL
_____ Title (Please type or print)

Date

Date

ATTEST:

APPROVED AS TO FORM:

Marcia Isenberg
Council Administrator

James Brewer or Jeffery M. Slayton
Legal Counsel

107164

**Exhibit A
Scope of Services**

The consultant will staff and facilitate the deliberations of the expert review panel established by Ordinance 13409 and prepare the panel's report for presentation to Council by October 8, 1999.

Consultant Responsibilities will include the following specific tasks:

- A. Organize, schedule, manage and facilitate all meetings of the expert review panel including preparation and mailing of all correspondence and agendas and coordination of total budget identified for expert review panel deliberations.
- B. Ensure that a work plan and timeline are delivered to the council budget chair and lead staff within ten (10) days of the first panel meeting.
- C. Regularly inform Council budget chair and lead staff of expert review panel deliberations and status of project budget. Incorporate Council questions and concerns into the panel's deliberations.
- D. Compile and analyze all pertinent available data necessary to address technical and policy questions concerns considered by the panel.
- E. Prepare report for Council with recommendations as to equal access requirements or alternative policy options that would protect competition.
- F. Monitor related developments in other local jurisdictions as well as the federal arena and inform Council.

Deliverables

The primary deliverable is a written report containing the findings, analysis supporting the findings, conclusions, and recommendations of the expert review panel. The report shall be written in a clear and concise manner. A preliminary draft report shall be prepared by the consultant by September 8, 1999 and will be reviewed by the expert review panel for action by September 22, 1999. The consultant shall then prepare the final report by September 30, 1999 for review and action by the expert review panel. The consultant shall deliver an oral presentation of the final report to the Budget and Fiscal Management Committee during October, at a time mutually agreeable to the committee and panel. These due dates may be adjusted upon recommendation of the panel if approved by the budget and fiscal management committee of the Council.

The consultant will produce monthly status reports to include planned activities versus actual activities completed since the last status reports, and planned activities that will be undertaken and/or accomplished between the current status report period and the next status report period.

The consultant also is expected to prepare agendas and all other necessary communications for the efficient operation of the panel.

It is anticipated that the expert review panel will set its own work plan and schedule to ensure that the work product is delivered on or before October 8, 1999. If they determine that a different deadline is required, that recommendation shall be presented to the budget committee for approval.

Exhibit B

REQUEST FOR PROPOSAL 10716



KING COUNTY
 PROCUREMENT AND CONTRACT
 SERVICES DIVISION
 620 K.C. ADMIN. BUILDING
 500 - 4TH AVENUE
 SEATTLE, WASHINGTON 98104
 (206) 296-4210
 (206) 296-4211 FAX

PROPOSAL NUMBER: 122-99KJF		
PROPOSAL OPENING DATE:	May 27, 1999	TIME: 2:00 P.M.
ALL PROPOSALS MUST BE SUBMITTED TO THE PURCHASING AGENCY NO LATER THAN 2:00 P.M. EXACTLY		
BUYER: Karen Fitzthum		
REQUISITION #: 02871		

DATE ISSUED: May 6, 1999

TITLE: TELECOMMUNICATIONS AND TECHNOLOGY CONSULTANT
 KING COUNTY COUNCIL

Sealed bid proposals are hereby solicited and will be received only at the office of the King County Procurement Services Division in Room 620 of the King County Administration Building, 500 Fourth Avenue, Seattle, Washington 98104 for a Telecommunications and Technology Consultant for the County Council. These services shall be provided to King County in accordance with the following and the attached instructions, requirements, and specifications.

Submission: King County requires the proposer to sign and return *this entire RFP document*, excluding attachments, and to provide *one photocopy* of the signed RFP (two items). The proposer shall provide *one unbound original* and *five (5) copies* of the proposal response, data or attachments offered (six items). The original in both cases shall be dated or stamped "Original".

Proposers are urged to use recycled/recyclable products and both sides of paper for printed and photocopied materials, whenever practicable, in preparing responses to this RFP.

Pre-Proposal Conference: A conference to discuss questions related to this RFP shall be held at 10:00 a.m., Monday, May 17, 1999 in Conference Room #610, sixth floor, King County Administration Building, above address.

Questions: After the Pre-Proposal Conference, Proposers will be required to submit any further questions in writing prior to the close of business, to the above address, in order for staff to prepare any response required to be answered by Addendum.

NOTE: INFORMATION WITHIN BORDERED AREA MUST BE COMPLETED AND SIGNED.

This document can be made available from the ADA Liaison, at (206) 296-4210 or TDD (206) 296-0100, in large print, audio cassette, or Braille

LEGAL NAME OF OFFEROR/CONTRACTOR (PRINT OR TYPE)			NAME OF AUTHORIZED REPRESENTATIVE (PRINT OR TYPE)		
STREET			TITLE		
CITY	STATE	ZIP	SIGNATURE		
TELEPHONE NUMBER		FAX NUMBER			

SECTION I - GENERAL INFORMATION

- A. King County is an Equal Opportunity Employer and does not discriminate against individuals or firms because of their race, color, creed, marital status, religion, age, sex, national origin, sexual orientation, or the presence of any mental, physical or sensory handicap in an otherwise qualified handicapped person.
- B. In accordance with the provisions of Washington Initiative 200, no County Minority and Women Business (M/WBE) utilization requirements shall apply to this Contract. No minimum level of M/WBE subcontractor participation or purchase from M/WBE certified vendors is required and no preference will be given by the County to a bidder or proposer for their M/WBE utilization or M/WBE status. Provided, however, that any affirmative action requirements set forth in any federal regulations or statutes included or referenced in the Contract documents will continue to apply. King County encourages the utilization of minority owned businesses and women-owned businesses ("MBEs" and "WBEs"; collectively, "M/WBEs") in County contracts.
- C. All proposals submitted and evaluation materials become public information and may be reviewed by appointment by anyone requesting to do so *at the conclusion* of the evaluation, negotiation, and award process. This process is concluded when a signed contract is completed between King County and the selected Consultant. Please note that if an interested party requests copies of submitted documents or evaluation materials, a standard King County copying charge per page must be received prior to processing the copies. King County *will not* make available photocopies of pre-printed brochures, catalogs, tear sheets or audio-visual materials that are submitted as support documents with a proposal. Those materials will be available for review at King County Procurement.
- D. No other distribution of proposals will be made by the proposers prior to any public disclosure regarding the RFP, the proposal or any subsequent awards without written approval by King County. For this RFP all proposals received by King County shall remain valid for ninety (90) days from the date of submittal. All proposals received in response to this RFP will be retained.
- E. Proposals shall be prepared simply and economically, providing a straightforward and concise but complete and detailed description of the proposer's abilities to meet the requirements of this RFP. Fancy bindings, colored displays and promotional materials are not desired. Emphasis shall be on completeness of content.
- F. If a proposal contains any information that the proposer does not wish disclosed to the public or used for any purpose other than evaluation, all such information must be indicated with the following statement *on the front page* of the proposal:

The information contained on pages _____ shall not be duplicated or used in whole or part for any other purpose than to evaluate the proposal; provided that if a contract is awarded to this office as a result of or in connection with the submission of such information, King County shall have the right to duplicate, use or disclose this information to the extent provided in the contract. This restriction does not limit King County's right to use information contained herein if obtained from another source.

Although a proposer may identify material as proprietary or confidential, King County *may* be required to release the information based on Public Information Disclosure laws or requirements. If King County complies with such requirements, the County will inform the affected proposer in writing to the company, person and address noted on the front page of the RFP document. Proposers will have 10 calendar days from the date of such notice to take action to prevent the release of the information. Absent of that action, King County will make the documents available on the 11th calendar day of the date of original notice.

- G. Provided, the Washington State Public Disclosure Act (RCW 42.17) requires public agencies in Washington to promptly make public records available for inspection and copying unless they fall within the specified exemptions contained in the Act, or are otherwise privileged.
- H. King County reserves the right to reject any or all proposals that are deemed not responsive to its needs.

NAME OF OFFEROR: _____

- I. In the event it becomes necessary to revise any part of this RFP, addenda shall be provided to all proposers who received the basic RFP.
- J. King County is not liable for any cost incurred by the proposer prior to issuing the contract.
- K. A contract may be negotiated with the proposer whose proposal would be most advantageous to King County in the opinion of the King County Council, all factors considered. King County reserves the right to reject any or all proposals submitted.
- L. It is proposed that if a selection is made as a result of this RFP, a fixed price contract will be negotiated. Negotiations may be undertaken with the proposer who is considered to be the most suitable for the work. This RFP is primarily designed to identify the most qualified firm. Price and schedule will be negotiated with the "first choice" proposer; negotiations may be instituted with the second choice and subsequent proposer until the project is canceled or an acceptable contract is executed.
- M. Other departments within King County may desire to place orders against this contract. King County retains the right to add or delete departments as needed.
- N. The contents of the proposal of the selected proposer will become contractual obligations if a contract ensues. Failure of the proposer to accept these obligations may result in cancellation of their selection.
- O. A contract between the contractor and King County shall include all documents mutually entered into specifically including the contract instrument, the RFP, and the response to the RFP. The contract must include, and be consistent with, the specifications and provisions stated in the RFP.
- P. New releases pertaining to this RFP, the services, or the project to which it relates, will not be made without prior approval by, and then only in coordination with, the King County Council.
- Q. King County Code 4.16.025 prohibits the acceptance of any proposal after the time and date specified on the Request for Proposal. There shall be no exceptions to this requirement.
- R. King County agencies' staff are prohibited from speaking with potential proposers about the project during the solicitation.

Please direct all questions to:

Karen Fitzthum
Buyer
(206) 205-5428
karen.fitzthum@metrokc.gov

a contract is awarded based on this RFP, it will contain the following provision:

Contract Extension

The contract period may be extended in one (1) year increments for two (2) additional one-year periods in accordance with the County's best interest and at the sole option of the County. The price(s) submitted shall be the maximum allowed during the life of the entire contract.

SECTION II – PROJECT SPECIFICATIONS AND SCOPE OF WORK.**Introduction**

The Metropolitan King County Council is seeking to hire a consultant or consulting firm with current telecommunications and technology credentials and specific experience relating to competition and consumer privacy issues in the field of telecommunications and internet services.

Background

In February 1999, the Council adopted Ordinance 13409 which conditionally approved the transfer of control of TCI, a cable franchise holder in King County, to AT&T. The Council was unable to fully address the associated technical, economic, and policy questions within the short time available for their review of this transfer request. Of primary concern to the Council in their consideration of this transfer was whether TCI/AT&T should be required to provide equal access to its cable internet modem service platform to internet service providers other than its affiliate AtHome Corporation. Consumer privacy concerns relative to the AtHome service also were of concern and were not resolved by this ordinance.

In order to consider these outstanding concerns, an expert review panel was established by Ordinance 13409 to further study the unresolved technical, economic, and policy issues and report back to the Council by October 8, 1999. The goals of the expert review panel were established by Ordinance 13409 and are summarized as follows:

- Consider economic and technical arguments for and against the imposition of an equal access policy.
- Provide an independent assessment of impact on competition and choice of providers.
- The selection and establishment of the expert review panel currently is underway and is not an element of this request.

Scope of Work

Objective: The purpose of this Request for Proposal is to hire a consultant to staff and facilitate the deliberations of the expert review panel established by Ordinance 13409 and to prepare the panel's report for presentation to Council by October 8, 1999.

Consultant Responsibilities will include the following specific tasks:

- A. Organize, schedule, and facilitate all meetings of the expert review panel.
- B. Ensure that a work plan and timeline are delivered to the council budget chair and lead staff within ten (10) days of the first panel meeting.
- C. Regularly inform Council budget chair and lead staff of expert review panel deliberations. Incorporate Council questions and concerns into the panel's deliberations.
- D. Compile and analyze all pertinent available data necessary to address technical and policy questions concerns considered by the panel.
- E. Prepare report for Council with recommendations as to equal access requirements or alternative policy options that would protect competition.
- F. Monitor related developments in other local jurisdictions as well as the federal arena and inform Council.

Deliverables

The primary deliverable is a written report containing the findings, analysis supporting the findings, conclusions, and recommendations of the expert review panel. The report is expected to be written in a clear and concise manner. A preliminary draft report shall be prepared by the consultant by September 8, 1999 and will be reviewed by the expert review panel for action by September 22, 1999. The consultant shall then prepare the final report by September 30, 1999 for review and action by the expert review panel. The consultant shall deliver an oral presentation of the final report to the Budget and Fiscal Management Committee during October, at a time mutually agreeable to the committee and panel.

NAME OF OFFEROR: _____

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The consultant will produce monthly status reports to include planned activities versus actual activities completed since the last status reports, and planned activities that will be undertaken and/or accomplished between the current status report period and the next status report period.

The consultant also is expected to prepare agendas and all other necessary communications for the efficient operation of the panel. It is anticipated that the expert review panel will set its own work plan and schedule to ensure that the work product is delivered on or before October 8, 1999. If they determine that a different deadline is required, that recommendation shall be presented to the budget committee for approval.

Reporting Structure

The Chair and Lead Legislative Analyst of the Budget and Fiscal Management Committee will supervise consultant services. The consultant will be expected to meet the lead analyst to review project progress on a semi-weekly basis.

Budget

The budget for this scope of work is limited. If sufficient funds are not available to complete the full scope of work or the project, the County reserves the right to reduce the scope of work or increase the amount of money available for the project. However, RFP respondents should include an estimate to perform the full scope of work (see 7.D.)

Proposal Format

The RFP submittal shall consist of (1) a letter of interest; (2) resume of consultant and any associates proposed for assignment to this project; (3) a client list from 1994-1999; (4) a comparable work sample; and (5) the proposal information which shall include the following:

- a. Provide a brief summary of your understanding of the outstanding issues and how an expert review panel might best approach the scope of work.
- b. Provide verification that the proposed personnel have the knowledge in the areas of monopoly/competitive analysis of telecommunications and/or technology sectors; regulatory practices and principles; and understanding of technical issues related to the provision of internet services.
- c. Provide a list of projects completed in the last 24 months, with references (names and phone numbers); provide summaries for similar projects completed in the last 24 months by the same personnel proposed in response to this RFP; please include references for each summary with a contact name and phone number.
- d. Provide a lump sum cost estimate for the project to include hourly rates for team members and all expenses that the County would be charged and how they were calculated.

Anticipated Schedule for the Consultant Selection Process

Beginning the week of May 31 responses will be reviewed and ranked. Finalists may be required, at their expense, to be interviewed by the consultant review panel. By Friday, June 4, 1999 the finalist will be selected and notified.

Evaluation Criteria

Selection Process

Each proposal shall be examined to determine if it complies with the requirements and functional needs described in this RFP. A Technical Evaluation Committee according to the requirements outlined below will evaluate all proposals received. King County reserves the right to request a demonstration of the most responsive proposers.

NAME OF OFFEROR: _____

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The total points possible for the written evaluation is 100. King County reserves the right to conduct interviews after written evaluations are completed. If interviews are conducted, the total possible points attainable in the interview phase would be 40. In this case, the total possible points will be 140.

Proposals will be ranked according to the following criteria:

Extent of experience evaluating issues of competitiveness and anti-competitive behavior in telecommunications and or technology markets and issues relating to access policies in multiple providers interconnected networks	25 points
Experience facilitating a related technical expert review panel	20 points
Knowledge of consumer privacy issues concerning telecommunications and information services	15 points
Experience communicating complex technical concepts, ideas and analyses in clear, concise terms.	25 points
Responsiveness to the scope of work and the clarity, organization and completeness of the proposal	15 points
Total for Written Evaluation	100 Points

Interview Points Available (if conducted)	40 Points
Total Points for Both Evaluations	140 Points

NAME OF OFFEROR: _____

SECTION III - NONDISCRIMINATION AND AFFIRMATIVE ACTION

If a contract is awarded from this Request for Proposals, it will contain the following contract language:

PART 1 - NON-DISCRIMINATION

1. King County Code Chapters 12.16 and 12.18 are incorporated by reference as if fully set forth herein and such requirements apply to this Contract; provided however, that no specific levels of utilization of minorities and women in the workforce of the Consultant shall be required, and the Consultant is not required to grant any preferential treatment on the basis of race, sex, color, ethnicity or national origin in its employment practices; and provided further that, notwithstanding the foregoing, any affirmative action requirements set forth in any federal regulations, statutes or rules included or referenced in the contract documents shall continue to apply.
2. During the performance of this Contract, neither the Consultant nor any party subcontracting under the authority of this Contract shall discriminate nor tolerate harassment on the basis of race, color, sex, religion, nationality, creed, marital status, sexual orientation, age, or the presence of any sensory, mental, or physical disability in the employment or application for employment or in the administration or delivery of services or any other benefits under this Contract.
3. The Consultant will, prior to the commencement of the work and during the term of this Contract, furnish the County, upon request and on such forms as may be provided by the County, a report of the affirmative action taken by the Consultant in implementing the terms of this section. The Consultant will permit access by the County to the Consultant's records of employment, employment advertisements, application forms, other pertinent data and records related to this Contract for the purpose of monitoring and investigation to determine compliance with these requirements.
4. The Consultant will implement and carry out the obligations contained in its Affidavit and Certificate of Compliance regarding equal employment opportunity. Failure to implement and carry out such obligations in good faith may be considered by the County as a material breach of this Contract and grounds for withholding payment and/or termination of the Contract and dismissal of the Consultant.
5. The Consultant shall comply fully with all applicable federal, state and local laws, ordinances, executive orders and regulations that prohibit such discrimination. These laws include, but are not limited to, RCW Chapter 49.60 and Titles VI and VII of the Civil Rights Act of 1964.
6. During the performance of this Contract, neither the Consultant nor any party subcontracting under the authority of this Contract shall engage in unfair employment practices. It is an unfair employment practice for any:
 1. Employer or labor organization to discriminate against any person with respect to referral, hiring, tenure, promotion, terms, conditions, wages or other privileges of employment;
 2. Employment agency or labor organization to discriminate against any person with respect to membership rights and privileges, admission to or participation in any guidance program, apprenticeship training program, or other occupational training program;
 3. Employer, employment agency, or labor organization to print, circulate, or cause to be printed, published or circulated, any statement, advertisement, or publication relating to employment or membership, or to use any form of application therefor, which indicates any discrimination unless based upon a bona fide occupation qualification;

4. Employment agency to discriminated against any person with respect to any reference for employment or assignment to a particular job classification;
5. Employer, employment agency or a labor organization to retaliate against any person because this person has opposed any practice forbidden by KCC Chapter 12.18 or because that person has made a charge, testified or assisted in any manner in any investigation, proceeding or hearing initiated under the provisions of KCC Chapter 12.18;
6. Publisher, firm, corporation, organization or association printing, publishing or circulating any newspaper, magazine or other written publication to print or cause to be printed or circulated any advertisement with knowledge that the same is in violation of KCC Chapter 12.18.030C., or to segregate and separately designate advertisements as applying only to men and women unless such discrimination is reasonably necessary to the normal operation of the particular business, enterprise or employment, unless based upon a bona fide occupational qualification; and/or
7. Employer to prohibit any person from speaking in a language other than English in the workplace unless:
 - a. The employer can show that requiring that employees speak English at certain times is justified by business necessity, and
 - b. The employer informs employees of the requirement and the consequences of violating the rule.

PART 2 - AFFIRMATIVE ACTION REPORTING AND REQUIRED SUBMITTALS

- A. All Consultants entering into a contract or agreement with King County valued at \$25,000 or more shall, within ten days after the bidder receives written notice of selection, submit the following:
 1. A Personnel Inventory Report on the form provided by the County. Subject to the provisions of KCC Chapter 12.16.060, the Consultant's Personnel Inventory Report shall be effective for two years after the date on which the report was submitted.
 2. An Affidavit of Compliance demonstrating the Consultant's commitment to comply with the provisions of KCC Chapter 12.16.
 3. A Sworn Statement of Compliance with KCC, Chapter 12.16 from all labor unions or employee referral agencies referring workers or employees or providing or supervising apprenticeship or other training programs from whom Consultant obtains employees.
 4. ADA/504 Disability Assurance of Compliance and Corrective Action Plan.
 5. As required by KCC Chapter 12.16, all Consultants entering into contracts with King County shall provide the County with assurance of their compliance with the provisions of Section 504 of the Federal Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. The Consultant shall complete and submit a Section 504 self-evaluation and corrective action plan. An assurance of compliance, must be signed and submitted to the County.
 6. If the Consultant has previously submitted the Disability Assurance of Compliance form and Corrective Action Plan to the County, it is exempt from filing the Disability form for two years from the date it was received by the County.
- B. The Consultant shall submit Personnel Inventory Reports, Affidavits and Certificates of Compliance and Sworn Statements of Compliance from its subconsultants, regardless of tier, in the same manner as required of the Consultant.

NAME OF OFFEROR: _____

- C. Assistance with the requirements of this Section and copies of Chapters 12.16 and 12.18 are available from the Minority and Women's Business Enterprise and Contract Compliance Division, phone (206) 684-1330.

PART 3 - NONDISCRIMINATION IN SUBCONTRACTING PRACTICES

A. Compliance with Initiative 200

In accordance with the provisions of Washington Initiative 200, no County Minority and Women Business (M/WBE) utilization requirements shall apply to this Contract. No minimum level of M/WBE subconsultant participation or purchase from M/WBE certified vendors is required and no preference will be given by the County to a bidder or proposer for their M/WBE utilization or M/WBE status. Provided, however, that any affirmative action requirements set forth in any federal regulations or statutes included or referenced in the Contract documents will continue to apply.

B. Non-Discrimination

During the term of this Contract, the Consultant shall not create barriers to open and fair opportunities to participate in County contracts or to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subconsultants and suppliers, the Consultant shall not discriminate against any person on the basis of race, color, creed, religion, sex, age, nationality, marital status, sexual orientation or the presence of any mental or physical disability in an otherwise qualified disabled person.

C. Record-Keeping Requirements

The Consultant shall maintain, for at least 12 months after completion of all work under this contract, records and information necessary to document its level of utilization of M/WBEs and other businesses as subconsultants and suppliers in this contract and in its overall public and private business activities for the same period. The Consultant shall also maintain, for at least 12 months after completion of all work under this contract, all written quotes, bids, estimates or proposals submitted to the Consultant by all businesses seeking to participate on this Contract. Consultant shall make such documents available to the County for inspection and copying upon request. If this contract involves federal funds, Consultant shall comply with all record keeping requirements set forth in any federal rules, regulations or statutes included or referenced in the contract documents.

D. Open Competitive Opportunities

King County encourages the utilization of minority owned businesses and women-owned businesses ("MBEs and "WBEs"; collectively, "M/WBEs") in County contracts. The County encourages the following practices to promote open competitive opportunities for small businesses including M/WBEs:

- 1) Attending a pre-bid or pre-solicitation conference, if scheduled by the County, to provide project information and to inform M/WBEs and other firms of contracting and subcontracting opportunities.
- 2) Placing all qualified small businesses attempting to do business in King County, including M/WBEs, on solicitation lists, and providing written notice of subcontracting opportunities to M/WBEs and all other small businesses capable of performing the work, including without limitation all businesses on any list provided by the County, in sufficient time to allow such businesses to respond to the written solicitations.
- 3) Breaking down total requirements into smaller tasks or quantities, where economically feasible, in order to permit maximum participation by small businesses including M/WBEs.
- 4) Establishing delivery schedules, where the requirements of this contract permit, that encourage participation by small businesses, including M/WBEs.

- 5) Providing small businesses including M/WBEs that express interest with adequate and timely information about plans, specifications, and requirements of the contract.
- 6) Utilizing the services of available community organizations, Consultant groups, local assistance offices, the County, and other organizations that provide assistance in the recruitment and placement of small businesses including M/WBEs.

Further, the County encourages small businesses, including M/WBEs, to participate in the following practices to promote open competitive opportunities:

- 1) Attending a pre-bid or pre-solicitation conference, if scheduled by the County, to receive project information and to inform prime bidders/proposers of contracting and subcontracting capabilities.
- 2) Requesting placement on solicitation lists, and receipt of written notice of subcontracting opportunities.
- 3) Utilizing the services of available community organizations, Consultant groups, local assistance offices, the County, and other organizations that provide assistance in the recruitment and placement of small businesses and M/WBEs.

E. Sanctions for Violations

Any violation of the mandatory requirements of the provisions of this Section shall be a material breach of contract for which the Consultant may be subject to damages and sanctions provided for by contract and by applicable law.

PART 4 - REQUIREMENTS DURING WORK

A. Affidavits of Amounts Paid

Upon completion of all work and as a condition precedent to final payment, the Consultant shall submit a final Affidavit of Amounts Paid, identifying amounts actually paid and amounts owed to each subcontracting firm for performance under the Contract. Failure to submit such affidavits may result in withholding of payments or the final payment. Affidavit forms will be provided by King County.

B. Site Visits

King County may at any time visit the site of the work and the Consultant's office to review records related to actual utilization of and payments to subcontracting firms. The Consultant shall maintain sufficient records necessary to enable King County to review utilization of subcontracting firms. The Consultant shall provide every assistance requested by King County during such visits.

SECTION IV - GENERAL CONTRACT REQUIREMENTS**A. Changes**

Either party may request changes in the scope of services and performing or reporting standards to be performed or provided herein. Proposal changes which are mutually agreed upon shall be incorporated by written amendment to the agreement by the King County Procurement Services Division.

B. Termination Clauses:**1. Termination for Convenience**

The County for its convenience may terminate this contract, in whole or in part, at any time by written notice sent certified mail, return receipt requested, to the successful awardee. After receipt of a Notice of Termination, and except as directed by the contract administrator, the Successful Awardee shall immediately stop work as directed in the Notice, and comply with all other requirements in the Notice. The Successful Awardee shall be paid its costs, including necessary and reasonable contract close-out costs and profit on that portion of the work satisfactorily performed up to the date of termination as specified in the notice. The Successful Awardee shall promptly submit its request for the termination payment, together with detailed supporting documentation. If the Successful Awardee has any property in its possession belonging to the County, the Successful Awardee will account for the same and dispose of it in the manner the County directs.

2. Termination for Default

In addition to termination for convenience, if the Successful Awardee does not deliver supplies in accordance with the contract delivery schedule, or if the contract is for services and the Successful Awardee fails to perform in the manner called for in the contract, or if the Successful Awardee fails to comply with any other material provisions of the contract, the County may terminate this contract, in whole or in part, for default. Termination shall be effected by serving a Notice of Termination by certified mail (return receipt requested) on the Successful Awardee setting forth the manner in which the Successful Awardee is in default and the effective date of termination; provided that the Successful Awardee shall have ten (10) calendar days to cure the default. The Successful Awardee will only be paid for goods delivered and accepted; or services performed in accordance with the manner of performance set forth in the contract less any damages to the County caused by such default.

The termination of this contract shall in no way relieve the Successful Awardee from any of its obligations under this contract nor limit the rights and remedies of the County hereunder in any manner.

3. Termination for Non-Appropriation

This contract may be canceled at the end of the then current fiscal period for non-appropriation of funds by the King County Council. Such cancellation shall be upon thirty (30) days written notice to the Successful Awardee. King County's fiscal period ends December 31 of each year. If the contract is terminated as provided in this subsection:

- a. The County will be liable only for payment in accordance with the terms of this contract for services rendered prior to the effective date of termination; and
- b. The Successful Awardee shall be released from any obligation to provide further services pursuant to the contract as are affected by the termination.

Funding under this contract beyond the current appropriation is conditional upon the appropriation by the County Council of sufficient funds to support the activities described in this contract. Should such an appropriation not be approved, the contract will terminate at the close of the current appropriation year.

C. Cancellation

King County reserves the right to terminate this contract at any time by five (5) days written notice to the contractor or to extend by contract amendment, agreed to by the contractor, the period of this contract.

D. Prime Contractor Responsibilities

The prime contractor will be required to assume responsibilities for all services offered in the proposal whether or not performed by the prime contractor. Further, the prime contractor will be the sole point of contact for King County with regard to contractual matters, including payment of any and all charges resulting from the contract. There will be no changes in the contract without approval of King County.

E. Non-Appropriation

King County may cancel the contract at the end of the then current fiscal period for non-appropriation of funds by the King County governing body. Such cancellation shall be upon 30 days written notice to the contractor. King County's fiscal period ends December 31 of each year.

SECTION V - ADDITIONAL INFORMATION & REQUIREMENTS**A. Disclosure**

King County Code 3.04.120 requires that anyone entering into a contract with a value of more than \$2,500 must file a disclosure statement with the Board of Ethics and the King County Executive.

The selected consultant agrees to the conditions of King County Code 3.04.120 and shall provide a Consultant Disclosure Form.

B. Non-Discrimination

1. The selected contractor shall comply with the applicable requirements of King County Code 12.16 regarding Discrimination in Employment. Submittal of Affirmative Action forms is required for initial approval and at annual intervals.
2. Federal, State, and local laws prohibit discrimination based on disability. Section 504 of the Rehabilitation Act of 1973, as amended, requires that all recipients receiving federal monies be accessible to qualified/eligible persons with disabilities. All organizations and firms contracting with King County, except those providing tangible goods, must comply with Section 504 accessibility requirements.

C. Fair Employment Practices

During the performance of this contract, neither the contractor nor any party subcontracting under the authority of this contract shall engage in unfair employment practices as defined by King County Code, Chapter 12.18. Failure to comply with this Chapter shall result in the Contractor being subject to the procedures and penalties set forth therein.

D. Insurance

The selected contractor shall furnish General Liability (Commercial General Liability) in the amount of \$1,000,000 combined single limit; \$2,000,000 aggregate. In addition, evidence of Workers' Compensation and Stop-Gap Employer's Liability shall be \$1,000,000. Further, evidence of Professional Liability (Errors and Omissions) shall be \$1,000,000. Such policy shall endorse King County, and its appointed and elected officials and employees as additional insureds.

King County reserves the right to approve deductible/self-insured retention levels and the acceptability of insurers. A copy of the King County Certificate of Insurance Form is available for review by calling King County Procurement Services at (206) 296-4210.

E. Indemnification and Hold Harmless:

1. In providing services under this Contract, the Contractor is an independent contractor, not an employee of the County for any purpose. The Contractor shall be responsible for all federal and/or state tax, industrial insurance, and Social Security liability that may result from the performance of and compensation for these services and shall make no claim of career service or civil service rights which may accrue to a County employee under state or local law.

The County assumes no responsibility for the payment of any compensation, wages, benefits or taxes to, or on behalf of, the Contractor, its employees or others by reason of this Contract. The Contractor shall protect, indemnify and save harmless the County, its officers, agents and employees from and against any and all claims, costs and losses whatsoever occurring or resulting from 1) the Contractor's failure to pay any such compensation, wages, benefits or taxes; and 2) the supplying to the Contractor of work, services, materials or supplies by agency employees or others in connection with the performance of this Contract.

2. The Contractor further agrees that it is financially responsible for and shall repay the County all indicated amounts following an audit exception which occurs due to the negligence, intentional acts or failure for any reason to comply with the terms of this Contract by the Contractor, its officers, employees, agents or representatives. This duty to repay the County shall not be diminished or extinguished by the prior termination of the Contract.
3. The successful awardee shall protect, defend, indemnify, and hold the County, its agents, employees, officials, and officers harmless from, and shall process and defend at its own expense any and all claims, demands, suits, penalties, losses, damages, or costs of any kind whatsoever (hereinafter "claims") brought against the County arising out of or incident to the execution of, performance of, or failure to perform this Contract; PROVIDED, however, that if such claims are caused by or result from the concurrent negligence of the successful awardee, its agents, employees, and/or officers and the County, its agents, employees, and/or officers, this paragraph shall be valid and enforceable only to the extent of the negligence of the successful awardee, its agents, employees, and/or officers; and, PROVIDED FURTHER, that nothing in this paragraph shall require the successful awardee to indemnify, hold harmless, or defend the County, its agents, employees, and/or officers from any claims caused by or resulting from the sole negligence of the County, its agents, employees, and/or officers. The successful awardee's obligation under this paragraph shall include indemnification for claims made by the successful awardee's own employees or agents. For this purpose, the successful awardee, by mutual negotiation, hereby waives, with respect to the County only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. In the event the County incurs any judgment, award, and/or cost arising therefrom including attorneys' fees to enforce the provisions of this paragraph, and such fees, expenses, and costs shall be recoverable from the successful awardee.

Claims shall include, but not be limited to, assertions that the use or transfer of any software, book, document, report, film, tape, or sound reproduction or material of any kind, delivered hereunder, constitutes an infringement of any copyright, patent, trademark, trade name, or otherwise results in unfair trade practice.

F. Recycled/Recyclable Products

In accordance with King County Code 10.16, contractors are required to use recycled and recyclable products, and both sides of paper sheets for printed and photocopied materials, whenever practicable, in fulfilling contractual obligations to the County.

SECTION VI - MAINTENANCE OF RECORDS

- A. The Contractor shall maintain accounts and records, including personnel, property, financial and programmatic records and other such records as may be deemed necessary by the County to ensure proper accounting for all project funds and compliance with this Agreement. All such records shall sufficiently and properly reflect all direct and indirect costs of any nature expended and services provided in the performance of this Contract.
- B. These records shall be maintained for a period of six (6) years after termination hereof unless permission to destroy them is granted by the Office of the Archivist in accordance with RCW Chapter 40.14, or unless a longer retention period is required by law.

SECTION VII - AUDITS AND EVALUATION

- A. The records and documents with respect to the Contractor's history of minority and women's business utilization and to all matters covered by this Contract shall be subject at all times to inspection, review, or audit by the County and/or federal/state officials so authorized by law during the performance of this Contract and six (6) years after termination thereof.
- B. The Contractor shall provide right of access to its facilities, including those of any subcontractor, to the County, the state and/or federal agencies or officials at all reasonable times in order to monitor and evaluate the services provided under this Contract. The County will give advance notice to the Contractor in the case of fiscal audits to be conducted by the County.
- C. The Contractor agrees to cooperate with the County or its agent in the evaluation of the Contractor's performance under this Contract and to make available all information reasonably required by any such valuation process. The results and records of said evaluation shall be maintained and disclosed in accordance with RCW Chapter 42.17.

SECTION VIII - EXHIBITS

The following sample forms have been included herein for the proposer's *information*. The awarded contractor shall complete the forms and comply with these requirements prior to contract award. **(DO NOT SUBMIT THEM WITH THE PROPOSAL.)**

- A. King County Personnel Inventory Report
B. Affidavit and Certificate of Compliance with King County Code 12.16
C. Statement of Compliance - Union or Employee Referral Agency Statement
D. Final Affidavit of Amounts Paid
E. King County Code 3.04.120 and Consultant Disclosure Form
F. 504/ADA Disability Assurance of Compliance and Corrective Action Plan

The proposer shall initial here that he/she has reviewed these forms and in the event of being selected as the contractor shall comply with these requirements.

Initialed: _____

In addition, the contractor will be required to complete and submit a King County Insurance form or provide an approved equivalent.

Copies of these forms are available through King County Department of Finance, Procurement and Contract Services Division by calling (206) 296-4210.



PERSONNEL INVENTORY REPORT

10716

Legal name of business _____ Telephone No: _____
dba (if applicable) _____

Street address _____ City _____ State _____ Zip Code _____

Submitted by: _____ Title: _____ Date: _____

IRS Employer Identification Number: _____

Do you have any employees? No ___ Yes ___

If yes, list on the Employment Data Chart below the total number of employees for all businesses located in (1) King County. If none, list the total number of employees for all businesses located in (2) Washington State. If none, list the total number of employees for all businesses located in the (3) United States. Indicate which locale (1,2,3) report covers _____. This report covers Business Location(s) in (circle one): [King County, Washington State, Other States] for the Payroll Period ending (Month/Day/Year): _____.

Do any of your employees belong to a union and/or do you use an employee referral agency? No _____ Yes ___

If yes, list the unions and/or employee referral agencies with whom you have agreements: _____

If you expect to do more than \$10,000 worth of public work (construction) or, more than \$25,000 worth of business with King County, the unions or employee referral agencies must submit a statement of compliance with King County Code Chapter 12.16.

Job Categories	Whites		African Americans		Asians		Native Americans		Hispanics		Disabled		Minority Subtotal		Disabled Subtotal	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Managerial																
Professional																
Technical																
Clerical																
Sales																
Service																
Labor																
On-Job																
Apprentice																
Skilled Craft*																
Subtotal																

* Journey worker: List by classification on reverse, e.g., carpenter, plumber, etc.

Total number of employees reported above: _____ If no employees, write "0."

SUPPLEMENTAL FORM

Use this form as necessary to report the total work force.

Legal Name of Business _____ Telephone _____

Submitted by: _____ Title _____ Date _____

Job Categories	Whites		African Americans		Asians		Native Americans		Hispanics		Disabled		Minority Subtotal		Disabled Subtotal	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Managerial																
Professional																
Technical																
Clerical																
Sales																
Service																
Labor																
On-Job Trainees																
Apprentice																
Skilled Craft*																
Subtotal																

Contact the King County Procurement Services Division at (206) 296-4210 or the King County M/WBE and Contract Compliance Division (206) 684-1330 if you have any questions concerning completion of this form.



10716

AFFIDAVIT AND CERTIFICATE OF COMPLIANCE

With King County Code Chapter 12.16, Discrimination and Affirmative Action in
Employment by Contractors, Subcontractors and Vendors

The undersigned, being first duly sworn, on oath states, s/he is authorized by the Contractor, and on the Contractor's behalf, affirms and certifies as follows:

Definition: "Contractor" shall mean any contractor, vendor or consultant who supplies goods and/or services. "Contract" shall mean any contract, purchase order or agreement with King County Government, hereinafter called the County.

A. Contractor recognizes that discrimination in employment is prohibited by federal, state and local laws. Contractor recognizes that in addition to refraining from discrimination, affirmative action is required to provide equal employment opportunity. Contractor further recognizes that this affidavit establishes minimum requirements for affirmative action and fair employment practices and implements the basic nondiscrimination provisions of the general contract specifications as applied to service, consultant and Contractor contracts exceeding \$25,000, or public work contracts exceeding \$10,000. Contractor herein agrees that this affidavit is incorporated as an addendum to its general contract, and recognizes that failure to comply with these requirements may constitute grounds for application of sanctions as set forth in the general specifications. King County Code Chapter 12.16 and this affidavit, PROVIDED FURTHER, that in lieu of the affidavit, the Executive may accept a statement pledging adherence to an existing contractor affirmative action plan where the provisions of the plan are found by the Executive to substantially fulfill the requirements of this chapter.

B. Contractor shall give notice to their supervisors and employees of the requirements for affirmative action to be undertaken prior to the commencement of work.

C. This person has been designated to represent the Contractor and to be responsible for securing compliance with and for reporting on the affirmative actions taken.

AUTHORIZED AFFIRMATIVE ACTION REPRESENTATIVE

NAME:

D. Contractor will cooperate fully with the M/WBE and Contract Compliance Division and appropriate County agents while making every reasonable "good faith" effort to comply with the affirmative action and nondiscrimination requirements set forth in this sworn statement and in King County Code Chapter 12.16.

E. Reports. The Contractor agrees to complete and submit with this affidavit such additional reports and records that may be necessary to determine compliance with the affidavit and to confer with the M/WBE and Contract Compliance Division staff at such times as the County shall deem necessary. The information required by this chapter includes but is not limited to the following reports and records:

1. Personnel Inventory Report: This report shall include a breakdown of the employer's workforce showing race, gender, and disability status.

2. Monthly Utilization Report: This report shall apply to construction contractors and subcontractors and shall provide the number of hours of employment for minority, women and disabled employees by craft and category.

3. Self-assessment and Test Validation: Review of all employment policies and procedures, including tests, recruitment, hiring and training practices and policies, performance evaluations, seniority policies and practices, job classifications and job assignments to assure that they do not discriminate

3. Statement from Union or Worker Referral Agency: This statement affirms that the signee's organization has no practices and policies which discriminate on the basis of race, color, creed, religion, sex, age, marital status, sexual orientation, nationality or the presence of any sensory, mental or physical disability.

The information required in this section shall be submitted on forms provided by the County unless otherwise specified.

F. Subcontractors: For public work projects and contracts over \$10,000, the prime contractor shall be required to submit to the County, along with its qualifying documents under the Chapter, employment profiles, Affidavits and Certificates of Compliance Reports and Union Statements from its subcontractors in the same manner as these are required of the prime contractor. Reporting requirements of the prime contractor during the contract period will apply equally to all subcontractors.

G. Employment Goals for Minorities, Women and Persons with Disabilities: No specific levels of utilization of minorities and women in the workforce of the Contractor shall be required, and the Contractor is not required to grant any preferential treatment on the basis of race, sex, color, ethnicity or national origin in its employment practices. Notwithstanding the foregoing, any affirmative action requirements set forth in any federal regulations, statutes or rules included or referenced in the contract documents shall continue to apply.

H. Affirmative Action Measures: Contractor agrees to implement and/or maintain reasonable good faith efforts to comply with King County Code Chapter 12.16. The evaluation of a contractor's compliance with the Chapter shall be based upon the contractor's effort to achieve maximum results from its affirmative action measures. The Contractor shall document these efforts and shall implement affirmative action steps at least as extensive as the following:

1. Policy Dissemination: Internal and external dissemination of the contractor's equal employment opportunity policy; posting of nondiscrimination policies and of the requirements of this Chapter on bulletin boards clearly visible to all employees; notification to each subcontractor, labor union representative of workers with which there is a collective bargaining agreement or other contract, subcontract, or understanding of the contractor's commitments under the Chapter. Inclusion of the equal opportunity policy in advertising in the news media and elsewhere.

2. Recruiting: Adoption and implementation of recruitment procedures designed to increase the representation of women, minorities and persons with disabilities in the pool of applicants for employment, including, but not limited to establishing and maintaining a current list of minority, women and disabled recruitment sources, providing these sources written notification of employment opportunities and advertising vacant positions in newspapers and periodicals which have minority, female and/or disabled readership.

I. During the performance of the Contract, neither the Contractor nor any party subcontracting under the authority of the Contract shall discriminate nor tolerate harassment on the basis of race, color, sex, religion, nationality, creed, marital status, sexual orientation, age, or the

against, or have a discriminatory impact on, minorities, women and persons with disabilities and validate all tests and other selection requirements where there is an obligation to do so under state or federal law.

4. Record of Referrals: Maintain a current file of applications of each minority, women and persons with disabilities who are applicants or referrals for employment indicating what action was taken with respect to each such individual and the reasons therefor. Contact these people when an opening exists for which they may be qualified. Names may be removed from the file after twelve months have elapsed from their last application or referral.

5. Notice to Unions: Provide notice to labor unions of the contractor's nondiscrimination and affirmative action obligations pursuant to King County Code Chapter 12.16. Contractors shall also notify the M/WBE and Contract Compliance Division if labor unions fail to comply with the nondiscrimination or affirmative provisions.

6. Supervisors: Ensure that all supervisory personnel understand and are directed to adhere to and implement the nondiscrimination and affirmative action obligations of the contractor under King County Code Chapter 12.16. Such direction shall include, but not be limited to, adherence to, and achievement of, affirmative action policies in performance appraisals of supervisory personnel.

7. Employee Training: When reasonable, develop on-the-job training opportunities which expressly include minorities, women, and persons with disabilities and sponsor and/or utilize, training/educational opportunities for the advancement of women, minorities, and person with disabilities employed by the contractor, subject to acceptance by the County.

8. Responsible Person: Designate an employee who shall have the responsibility for implementation of the Contractor's affirmative action measures.

9. Progress Reporting: Prepare as part of the affirmative action plan an analysis and report on the progress made toward eliminating the underrepresentation of women, minorities and persons with disabilities in the contractor's workforce on an annual basis.

presence of any sensory, mental or physical disability in the employment or application for employment or in the administration or delivery of services or any other benefits under this Contract.

J. Contractor agrees to provide reasonable access upon request to the premises of all places of business and employment, relative to work undertaken in this Contract, and to records, files, information and employees in connection therewith, to the M/WBE and Contract Compliance Division or agent for purposes of reviewing compliance with the provisions of this Affidavit and agrees to cooperate in any compliance review.

K. Should the M/WBE and Contract Compliance Division find, upon complaint, investigation or review, the Contractor not be in good faith compliance with the provisions contained in this Affidavit, it shall notify the County and Contractor in writing of the finding fully describing the basis of noncompliance. Contractor may request withdrawal of such notice of noncompliance at such time as the compliance office has notified in writing the Contractor and the County that the noncompliance has been resolved.

L. The contractor agrees that any violation of any term of this Affidavit, including reporting requirements, shall be deemed a violation of King County Code Chapter 12.16. Any such violation shall be further deemed a breach of a material provision of the contract between the County and the Contractor. Such breach shall be grounds for implementation of any sanctions provided for in this chapter, including but not limited to, cancellation, termination or suspension, in whole or in part, of the Contractor by the County; liquidated damages; or disqualification of the contractor PROVIDED, that the implementation of any sanctions is subject to the notice and hearing provisions of King County Code Chapter 12.16.110.

CONTRACTOR: _____
Company Name Address City State Zip

I have read and understood the foregoing; and am authorized on behalf of the Contractor to agree to the terms and conditions of this and Affidavit and Certificate of Compliance and therefore, execute the same.

Authorized Signer: _____
Type or Print Title Phone Signature

VALID ONLY IF NOTARIZED

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____ 19 _____

Notary Public in and for the State of _____

residing at _____

KING COUNTY CONSULTANT DISCLOSURE FORM

10716



King County Board of Ethics

Pursuant to 3.04.120, this form is to be completed by private consultant firms or individuals entering into contracts with King County to perform studies costing in excess of \$2500. IMPORTANT NOTE: No payment shall be made on any contract with any private consultant firm and/or individual until five days after receipt of this form by the Board of Ethics, 900 Fourth Avenue, Bank of California Building, Suite 860, Seattle, WA 98104, MS-BOC 0860; (206) 296-1586; FAX (206) 205-0725. Both consultant and contracting department are responsible for ensuring compliance with this requirement.

PLEASE TYPE OR PRINT ALL INFORMATION

Today's date: _____
Consultant's Name: _____ Amount of Contract: _____
Address: _____ Duration: _____
Contracting King County Dept. AND Div: _____
Type of Services Contracted: _____

1. List the name of any office or directorship in the firm presently held by former King County employees whose employment with the County terminated within the past two years:

Name: _____ Office/Directorship: _____
Former County Department: _____ Date Terminated: _____

2. List any office or directorship in the firm held by any current King County employee:

Name: _____ Office/Directorship: _____
County Department: _____
Name: _____ Office/Directorship: _____
County Department: _____

3. List name of current King County employee's spouse or immediate family member holding an office or directorship in the firm:

Name: _____ Office/Directorship: _____
Name of County Employee: _____ County Department: _____
Relationship to Employee (spouse, sister, brother, etc.): _____
Name: _____ Office/Directorship: _____
Name of County Employee: _____ County Department: _____
Relationship to Employee (spouse, sister, brother, etc.): _____

4. Indicate level of financial interest in the firm by King County employee, his/her spouse or immediate family members:

Name: _____ Office/Directorship: _____

Percentage of Stock (if more than 5%): _____ Salary: _____

Other form of interest in firm (please specify): _____

5. Indicate whether an officer or director in the firm (whether salaried or unsalaried) is a member of a King County board or commission:

Name: _____ Office/Directorship: _____

County Board or Commission: _____

Name: _____ Office/Directorship: _____

County Board or Commission: _____

6. List all other contracts you or your firm have had with King County during the past five years, including the amount of the contract. Attach a separate sheet if necessary.

Type of work or service provided: _____

Contract Amount(s): _____

Duration of Contract(s): _____

Contracting Department AND Division: _____

7. Are there any potential conflicts of interest that need to be disclosed? If so, please explain:

...continue on an additional sheet if necessary.

ATTESTATION:

I, _____, certify under penalty of perjury
(print name)

that this statement is true, accurate, and complete.

(Signature) (Title)

Signed this _____ day of _____, 19____.

504/ADA ASSURANCE OF COMPLIANCE

Instructions

1. The 504/ADA Self-Evaluation form will help you evaluate your organization's or firm's programs and services, employment, and facilities to ensure they are accessible to people with disabilities. Complete the 504/ADA Self-Evaluation Questionnaire and keep it on file at your office. Do not return it with your contract.
2. Complete the 504/ADA Assurance of Compliance form. If your organization or firm is out of compliance with any of the 504/ADA requirements, indicate on the 504/ADA Disability Assurance of Compliance form the corrective actions that will be taken to achieve compliance and the date these actions will be completed.
3. Sign the 504/ADA Disability Assurance of Compliance and send the original back with your contract. Please keep a copy of your 504/ADA Disability Assurance of Compliance on file in your office for use during on-site reviews. You will be notified at least one week in advance of any scheduled review. (Note: This form may be used as an exhibit for other King County contracts for two years from the date the form is completed.)
4. Note that the "Quick Look" Barriers Checklist only pertains to the main office of a construction company, not the construction sites. Firms that provide services outside their office do not need to write a corrective action plan for physical accessibility as long as these services are provided in an accessible location for people with disabilities who cannot access the office. However, physical access must be reviewed in light of hiring an individual with a disability or accommodating a current employee who becomes disabled.
5. If you have questions regarding this process, or if you require the 504/ADA Self-Evaluation Questionnaire and 504/ADA Disability Assurance of Compliance in an alternate format, please contact a King County 504/ADA Disability Compliance Specialist at 206-296-7592 (voice) or 206-296-7596 V/TTY, or by e-mail at: Civil-Rights.OCRE@metrokc.gov

504/ADA General Information

Federal and State laws prohibit discrimination based on disability. Section 504 of the Rehabilitation Act of 1973, as amended (504), and The Americans with Disabilities Act of 1990 (ADA) require that King County and all organizations and firms contracting with King County, except those providing tangible goods, comply with the 504/ADA accessibility requirements.

504 and ADA define disability as anyone who has, has a history of, or is perceived as having a physical or mental impairment which substantially limits one or more major life activities. Disabilities include, but are not limited to: mobility, visual, hearing, or speech impairments; mental illness; epilepsy; learning disability; brain injury; HIV/AIDS; arthritis; cerebral palsy; developmental disability; multiple sclerosis; and alcohol and/or drug addiction.

DISABILITY RESOURCE LIST

Note: Inclusion in this resource list does not constitute endorsement by King County Government, nor does omission imply non-endorsement. Our goal is to provide you with information on some key resources available. Please contact us if you know of a useful resource missing from this list.

Governor's Committee on Disability Issues and Employment (GCDE)

Advises and informs the Governor, state and local governments, the business community, and the disability community on ADA and other issues related to disability policy. Spokane: 509-532-3149; Olympia: 360-438-3168.

Northwest Disability Business Technical Assistance Center (NWDBTAÇ)

Provides information, technical assistance, and training on the ADA. P.O. Box 9046, Olympia, WA 98507-9046; 360-438-3168 V M/S; 6000; 360-438-3167 TTY; 800-HELP-ADA; (800-435-7232) V/TTY 360-438-3208 Fax.

ADA Technical Assistance Hotline (U. S. Dept. of Justice)

Provides free technical assistance and informational materials to people with disabilities, businesses, state and local government agencies, and the general public to help them understand their rights and responsibilities under Titles II and III of the ADA. 800-466-4232 V/TTY.

<http://www.usdoj.gov/crt/ada/>

Job Accommodations Network (JAN)

An international toll-free consulting service that provides information about job accommodations and the employability of people with disabilities. JAN also provides information regarding the ADA. PO Box 6080, 918 Chestnut Ridge Road, Suite 1, Morgantown, West Virginia 26506-6080; JAN--ADA Information 800-526-7234 V/TTY; 800-ADA-WORK V/TTY; 800-232-9675 V/TTY; <http://janweb.icdi.wvu.edu/>

Emergency Procedures for Employees with Disabilities in Office Occupancies

This procedural guideline is published with funding from the US Fire Administration and

developed by the National Institute of Standards and Technology with assistance from the National Task Force on Life Safety and People with Disabilities. United States Fire Administration, 16825 South Seton Avenue, Emmitsburg, Maryland 21727.

AT&T Washington Telecommunications Relay Service (TRS) Washington Assistive Technology Alliance (WATA)

2901 3rd Avenue, Suite 300, Seattle, Washington 98121-1049; Relay Services: 800-833-6388 TTY; 800-833-6384 Voice.

Telecommunications Access Service (TAS), Washington State TTY Loan Program, Department of Social and Health Services [DSHS]

While primarily a source of loaned TTYs for qualified state residents on a sliding fee scale, used and reconditioned TTYs are given, free of charge, to non-profit organizations on a first come, first served basis. PO Box 45301, OB-42; Olympia, Washington 98504-5301; 800-422-7941 TTY; 800-422-7930 Voice.

Producing Materials in Alternative Formats

Agency guide provides information on producing materials in large print, on audio tape or computer disk, and Braille. Governor's Committee on Disability Issues and Employment, PO Box 9046, MS 6000, Olympia, WA 98507-9046.

Producing Materials in Alternative Formats

Agency guide provides information on producing materials in large print, on audio tape or computer disk, and Braille. Governor's Committee on Disability Issues and Employment, PO Box 9046, MS 6000, Olympia, Washington 98507-9046.

King County Office of Civil Rights Enforcement

Disability Compliance Specialist, King County Courthouse, 516 Third Avenue, Room E-224, Seattle, WA 98104-2321; 206-296-7592 V, 206-296-7596 V/TTY; 206-296-4329 Fax; e-mail: Civil-Rights.OCRE@metrokc.gov

General Requirements

Please check the boxes with the appropriate answers. If necessary, attach additional pages of explanation. If you have fewer than 15 employees, please skip the first section and start with "Program Access."

	YES	NO	N/A
Do you have a 504/ADA coordinator? If so, who?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name _____ Title _____ Phone _____			
Do you have an internal grievance procedure that incorporates due process standards and allows for quick and prompt solutions for any complaints based on alleged noncompliance with 504/ADA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a policy that provides for notifying participants, beneficiaries, applicants, employees (including those with vision and hearing disabilities), unions, and professional organizations holding collective bargaining or professional agreements that you do not discriminate on the basis of disability?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you notified these individuals of your nondiscrimination policy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you provide ongoing staff training to ensure that staff fully understand your policy of nondiscrimination on the basis of disability and can take all appropriate steps to facilitate the participation of individuals with disabilities in agency programs and activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Program Access

Do you notify the public and other interested parties that agency meetings, board of director meetings, hearings, conferences, public appearances by elected officials, and interviews will be held in accessible locations and that auxiliary aids (sign language interpreters, readers) will be provided, upon request, to participants with disabilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a Teletypewriter (TTY), or do you use the Washington Telecommunications Relay Service to facilitate communication with individuals who use TTYS for communication purposes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you provide ongoing training to familiarize appropriate staff with the operation of the TTY and other effective means of communicating over the telephone with people with disabilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Program Access (cont'd.)

	YES	NO	N/A
Do you make available, upon request, written material in alternate formats for people who have vision disabilities? Examples include, but are not limited to, Braille, audiocassette tapes, and large print.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are printed posters, announcements, and printed materials, including graphics, clearly legible and placed in physically accessible locations where small print can be read from a wheelchair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you have a mailing list for the purposes of information dissemination, does it include different disability groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are your TTY number and procedures for accessing your services printed on all material distributed to the public?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a policy and procedure for safely evacuating people with disabilities from your facility(s) during an emergency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Employment and Reasonable Accommodation

When gathering affirmative action data regarding disabilities, do you make it clear that: (1) the information requested is intended for use solely in connection with reporting requirements; (2) the information is voluntary; (3) the information will be kept confidential; and (4) refusal to provide or providing the information will not subject the applicant or employee to any adverse treatment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you make pre-employment inquiries or conduct pre-employment medical examinations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so, is the inquiry related to the applicant's ability to perform the job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you condition offers of employment on the results of these examinations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you require this examination for all employees in the same job classification?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all applicants in the same job classification asked the same medical and/or interview questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

504/ADA requires that information obtained concerning the medical condition or history of an applicant must be kept separate from personnel records and may be shared in only three ways:
(1) supervisors and managers may be informed of restrictions on the work or duties of individuals with disabilities and informed of necessary accommodation(s); (2) first aid and safety personnel may be informed if the condition might require emergency

Employment and Reasonable Accommodation (cont'd.)

treatment; and (3) government officials investigating compliance with 504/ADA shall be provided with relevant information upon request.
 Do you have a written policy stating the above?

During the application, interviewing, hiring, and employment process, do you provide reasonable accommodations to applicants and employees with disabilities?

Physical Accessibility

Complete the "Quick Look" Barriers Checklist and then answer the following questions:

Is the building(s) where your business is located barrier-free?

If you checked no to any of the items on the checklist, would these areas prevent an individual with a disability from accessing your program(s) or service(s)? If yes, describe on the Corrective Action Plan what steps will be taken to eliminate the barrier(s). If there are extenuating circumstances which would make barrier removal a financial or administrative burden, please explain in the Corrective Action Plan.

This 504/ADA Self-Evaluation Questionnaire was completed by:

Signature Date Phone Number

“QUICK LOOK” BARRIERS CHECKLIST

This checklist is designed to give a quick appraisal of potential problem areas for accessibility. For detailed review standards, refer to the Washington State Administrative Code (WAC) 51-40-1100, Chapter 11—Accessibility.

	YES	NO	N/A
<u>Building Access</u>			
Are 96" wide parking spaces designated with a 60" access aisle?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are parking spaces near main building entrance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a "drop off" zone at building entrance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the gradient from parking to building entrance 1:12 or less?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the entrance doorway at least 32 inches wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the door handle easy to grasp?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the door easy to open (less than 8 lbs. pressure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are other than revolving doors available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Building Corridors</u>			
Is path of travel free of obstruction and at least 36 inches wide for an individual who uses a wheelchair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is floor surface hard and not slippery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do obstacles (phones, fountains) protrude no more than four inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are elevator controls low enough (48") to be reached from a wheelchair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are elevator markings in Braille?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does elevator provide audible signals for the blind?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does elevator interior provide a turning area of 51" for wheelchairs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Restrooms</u>			
Are restrooms near building entrance/personnel office?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do doors have lever handles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are restroom entrance doors at least 32" wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is restroom large enough for wheelchair turnaround (51" minimum)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are stall doors at least 32" wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are grab bars provided in toilet stalls?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sinks at least 30" high with room for a wheelchair to roll under?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sink handles easily reached and used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are soap dispensers and towels, no more than 48" from the floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Personnel Office</u>			
Are doors at least 32" wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the door easy to open?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the threshold no more than 1/2" high?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the path of travel between furniture wide enough for wheelchairs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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504/ADA DISABILITY ASSURANCE OF COMPLIANCE

Complying with Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans With Disabilities Act of 1990, two federal laws which prohibit discrimination against qualified people with disabilities.

I understand that federal and state laws prohibit discrimination in public accommodation and employment based solely on disability. In addition, I recognize that Section 504 requires recipients of federal funds (either directly or through contracting with a governmental entity receiving federal funds) to make their programs, services, and activities, when viewed in their entirety, accessible to qualified and/or eligible people with disabilities. I agree to comply with, and to require that all subcontractors comply with, the 504/ADA requirements. I understand that reasonable accommodation is required in both program services and employment, except where to do so would cause an undue hardship or burden.

I agree to cooperate in any compliance review and to provide reasonable access to the premises of all places of business and employment and to records, files, information, and employees therein to King County for reviewing compliance with Section 504 and ADA requirements.

I agree that any violation of the specific provisions and terms of the 504/ADA Disability Assurance of Compliance and/or Corrective Action Plan required herein and Section 504 and the ADA, shall be deemed a breach of a material provision of the Contract between the County and the Contractor. Such a breach shall be grounds for cancellation, termination, or suspension, in whole or in part, of this Contract by the County.

According to the responses to the questions in the 504/ADA Self-Evaluation Questionnaire, (company name) _____ is in compliance with 504/ADA.

YES

NO

If the above response is no, the following corrective actions will be taken:

Corrective Action Plan

The following Corrective Action Plan is submitted to comply with Section 504 and ADA requirements.

General Requirements

Actions To Be Taken

Completion Date

504/ADA DISABILITY ASSURANCE OF COMPLIANCE (cont'd.)

Program Access

Actions To Be Taken

Completion Date

Employment and Reasonable Accommodation

Actions To Be Taken

Completion Date

Physical Accessibility

Actions To Be Taken

Completion Date

I Declare Under Penalty of Perjury under the Laws of the State of Washington that the Foregoing is True and Correct.

Contractor: _____
Company Name Street Address City State Zip

Authorized Signer: _____ Phone _____
Name (type or print) Title

Signature: _____

Exhibit C

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Ernest S. Ting and Associates
Management and Economic Counsel

510/530-3588 Fax: 510/530-2012

May 26, 1999

KING COUNTY
PROCUREMENT
AGENCY

MAY 27 1999

AM PM
7 8 9 10 11 12 1 2 3 4 5 6

Ms. Karen Fitzthum
King County Procurement
and Contract Services Division
King County Administration Building
500 Fourth Avenue, Room 620
Seattle, WA 98104

VIA FEDERAL EXPRESS

Dear Ms. Fitzthum:

I am pleased to offer this proposal in response to RFP No. 122-99KJF for a Telecommunications and Technology Consultant for the King County Council. I believe that the qualifications which I have documented are ideally suited to address the Council's needs and to carry out this project. They include:

- *Industry Expertise.* Wide-ranging skills and knowledge evaluating the most complex economic, technical, policy, legal, consumer and business issues in telecommunications and technology policy and regulation over the fifteen years since the 1984 Bell System divestiture
- *Specific Expertise as a Facilitator.* Experience and a particular focus on the process skills and expertise required to facilitate the deliberations of an expert panel with diverse perspectives on complex and potentially contentious subjects
- *Communication and Advising Expertise.* Specific skill, years of experience and expertise at communicating complex technical concepts in telecommunications and technology in a clear and concise way to officials charged with setting public policy.

Pursuant to the format prescribed by the RFP, this proposal contains a summary of qualifications and resume, client list, and comparable work sample, as well as specific proposal information. Please contact me at (510) 530-3588 or email erniet@netcom.com if you have any questions regarding this submission. Thank you for considering this information.

Yours truly,

Ernest S. Ting
ERNEST S. TING AND ASSOCIATES

Attachments



Ernest S. Ting and Associates
Management and Economic Counsel

510/530-3588 Fax: 510/530-2012

Summary of Qualifications Telecommunications and Information Technology Policy

Ernest S. Ting, principal of the firm, is an expert in telecommunications and technology policy with extensive training and experience from both the governmental and business perspectives. He has been a participant in the policy debate at the federal as well as state and local level since the breakup of the Bell System in 1984. As a consultant since 1995, Mr. Ting has assisted clients with policy and implementation issues associated with the Telecommunications Act of 1996 and state and local laws, the analysis of telephone company cost studies, and the development of expert witness testimony before regulatory commissions in states such as California, New York, Texas, Washington, Michigan, Pennsylvania and Connecticut.

From 1987 to 1995, Mr. Ting was in charge of the telecommunications group of the Division of Strategic Planning at the California Public Utilities Commission. In that capacity, he provided expert analyses of market, technological and legal changes in the telecommunications and information technology industries, and was the senior policy advisor to all of the commissioners on the development of regulatory reforms to reflect those changes.

During that time, Mr. Ting was the California Commission's principal staff spokesman before various national policy and industry bodies. He served on the staff of the Federal Communication Commission's Joint Federal-State Conference on Open Network Architecture, leading a task force on separations issues which developed recommendations adopted by FCC and state commissioners. He also served on the staff of the Communications Committee of NARUC, the national association of state public utility regulators.

In 1993, Mr. Ting assisted the California Commission and the Governor's Office in the development of one of the first comprehensive policy frameworks for promoting an "information superhighway" through the use of competitive markets. He was the project manager for the California Commission's report, *Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure*. The report's recommendations were adopted by the California Legislature and became the policy foundation for the state's movement to full local competition in telecommunications and associated information technologies.

The report also addressed the relationship of federal and state regulation to local and regional interests. In addition to his extensive work with federal and state policymakers, Mr. Ting acted as one of the Commission's principal liaisons with city governments and municipal utilities interested in promoting information infrastructure development or ameliorating its adverse impacts.

While at the California Commission, Mr. Ting played a key role in defending state and local discretion and authority over telecommunications and information technology policy. He was heavily involved in the development of legal strategy for the Commission during the course of a number of successful federal court challenges to attempts by the Federal Communications Commission to preempt state jurisdiction over the deployment of advanced technologies. He also led efforts to negotiate ways to reconcile federal, state and local policies in the overall public interest.

From 1986 to 1987, Mr. Ting was a senior economics and policy analyst for the Commission's Public Staff Division, the entity charged with representing the interests of residential and business consumers in the state. In that position, Mr. Ting served as the lead witness on a variety of subjects including access charge costs and rates, and information services policies. He also served as a member of the Incremental Cost Task Force of academic economists and regulatory experts which advised on the development of incremental costing analyses for local service. Mr. Ting was also a principal advisor to the Commission in the design of its 1989 decision adopting a price cap regulatory framework and its 1993 rulemaking on unbundling components of the network.

From 1984 to 1986, Mr. Ting was employed by Pacific Bell as a senior analyst and manager in various regulatory, business planning and financial management groups. In those capacities, he was one of the company's lead analysts of access charge market demand and revenues, liaison for marketing and cost study groups with regulatory commissions, and a lead analyst for witness support in general rate case and new service introduction proceedings.

In the past, Mr. Ting has been an instructor for workshops for public officials and staff on regulatory policy and jurisdictional issues in telecommunications. He has also taught graduate and undergraduate college courses in government regulation of business, and legal and regulatory issues in telecommunications. He has been a speaker or panelist on market, technology, legal and regulatory issues before a variety of national conferences and industry associations, including the National Cable Television Association, Information Industry Association, Competitive Telecommunications Association, ComNet, Tele-Communications Association, and the DMS-100 Centrex National Users Group Forum.

Mr. Ting graduated from Yale University in 1976 with a bachelor's degree in economics. His coursework at Yale included economic and policy issues in public utility ratemaking. He also received a Master of Business Administration degree from the Stanford University Graduate School of Business in 1980.

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Ernest S. Ting
3800 Monterey Boulevard
Oakland, California 94619-1550
(510) 530-3588
Fax: (510) 530-2012
E-mail: erniet@netcom.com

EXPERIENCE

1995- *Principal, Ernest S. Ting and Associates, Oakland*

- Provide expert consulting advice to corporate, governmental and non-profit clients on a variety of economic and management issues.
- Perform analyses of competitive conditions in the telecommunications and information industries. Offer expert witness testimony on complex economic and policy issues before various state and federal regulatory agencies. Also provide counsel on competitive market strategies.
- Provide counsel on strategic management and organizational change issues, and work with clients to facilitate organization change initiatives.

1986-95 *Group Manager -- Telecommunications, Division of Strategic Planning
California Public Utilities Commission, San Francisco*

- Senior policy advisor to the Commission on telecommunications industry issues. Led development of the 1993 landmark report *Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure* which was the original blueprint for the policy framework adopted by the Governor and California Legislature on emerging communications infrastructure and its relationship to information technology and applications. Acted as the state's lead staff negotiator before the Federal Communications Commission and other federal and state legislative and regulatory bodies.

1984-86 *Project Director, Marketing Planning; Assistant Manager, Financial Management,
Pacific Bell, San Ramon and San Francisco*

- Senior analyst with expertise in forecasting trends and changes in \$1 billion a year long-distance business segment of telecommunications firm's revenues.
- Developed innovative financial analysis and tracking techniques which dramatically improved corporate budget and business planning accuracy and the ability to see emerging financial risks due to changes in business demand and regulation.

1982-83 *Director, Program Evaluation and Planning, The CEIP Fund, Inc., Boston.*

- Senior manager for national non-profit organization in charge of marketing strategy, analysis of business and financial performance, and program evaluation. Supervised activities of six regional field offices.

1981-82 *Deputy Director for Finance and Administration, City of New Haven (Connecticut) Department of Welfare.*

- Chief financial officer for large local government agency. Directed financial management and operations staff, and represented the department before boards of elected local officials. Led development and management of annual budget and personnel development during a period of explosive growth in caseloads due to cuts in other categorical programs.
- In conjunction with hospitals, community health centers and others, designed and successfully negotiated an agreement for one of the first "managed care" medical programs for welfare recipients in the nation. Comprehensive redesign of the system for delivering health care dramatically raised service quality while reining in costs.

1978 *Assistant to the Director, Program Analysis, U. S. Environmental Protection Agency, Washington, D.C.*

- As part of "turnaround" effort, responsible for taking care of the staffing and administrative issues associated with the division's reorganization to support a complete review of EPA's program effectiveness and redesign of its budgeting process around "zero base" principles.

1977-78 *Program Analyst, U. S. Department of Commerce, Washington, D.C.*

- Leading expert on the economic and employment impacts of major energy projects such as offshore oil drilling and nuclear power plant construction. Under the aegis of the White House Office of Energy Policy and Planning, led the analysis by federal executive agencies of the socio-economic impact of a proposed Alaskan natural gas pipeline. Prepared formal findings and recommendations for the President.

EDUCATION

STANFORD BUSINESS SCHOOL, Master of Business Administration, 1980.
Concentration in public sector management.

YALE UNIVERSITY, Bachelor of Arts, Economics, 1976. Concentration in
microeconomics, quantitative analysis and legal and regulatory issues.

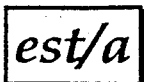
OTHER EXPERIENCE

TEACHING FACULTY APPOINTMENTS

- NARUC Advanced Regulatory Studies Program, 1994
- Lecturer, Legal and Regulatory Issues in Telecommunications, Graduate School of Technology Management, MBA and MS Degree Programs in Management, Golden Gate University, Fall 1993
- NARUC Technical Education Conference for Commissioners, 1991
- Instructor, Government Regulation of Business, BBA Degree Program in Business Administration, Menlo College, Spring 1980

APPOINTED BOARDS

- Member, Board of Directors, League of Women Voters of Oakland, 1996-1999. Vice President 1997-1999
- Member, Board of Directors, Action Alliance for Children, 1999-present.



Ernest S. Ting and Associates
Management and Economic Counsel

510/530-3588 Fax: 510/530-2012

Client List 1995-1999*

- Advanced Policy Institute, School of Public Policy and Social Research, University Of California at Los Angeles+
- AT&T Communications, Inc. And MCI Telecommunications, Inc., *jointly* (x)
- Eastern Telelogic Corporation#
- MCI Telecommunications, Inc., *and its successor entity*, MCI WorldCom, Inc.
- Michigan Cable Telecommunications Association
- Northwest Payphone Association#
- Oakland Sharing the Vision
- State Of California Air Resources Board, Sacramento Air Quality Management District, and South Coast Air Quality Management District+

- * The firm was formed in August 1995
- + Subcontract through Spiesberger and Associates
- (x) Administered by MCI Telecommunications, Inc.
- # Subcontract through Murray and Associates

SPECIFIC PROPOSAL INFORMATION

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A. Provide a brief summary of your understanding of the outstanding issues and how an expert review panel might best approach the scope of work

Pursuant to Ordinance 13409, an expert review panel (Panel) is being created to further study unresolved issues from the County's conditional approval of the transfer of TCI franchises to AT&T. The Ordinance states that the Panel will be composed of regulatory economists and engineers appointed by the Council, and will address "any anti-competitive implications of rolling out bundled high speed cable modem Internet services including legal, technical, and economic considerations as well as subscriber privacy issues." The panel is also to "provide an independent assessment of (the) impact on competition and the choice of providers".

In particular, the panel is to "consider arguments for and against the imposition of an equal access policy" -- a policy that would require AT&T/TCI to make the cable modem platform of the @Home service available to competing Internet service providers (ISPs). As illustrated in the schematic below, the bundled nature of the @Home service is consistent with the single-provider model previously established in the realm of cable programming. It clashes dramatically with the unbundled offerings

CABLE MODEL Bundled Service	TELEPHONY MODEL Separate Providers	
UNAFFILIATED CONTENT/APPLICATIONS	OTHER CONTENT/APPLICATIONS	
PROPRIETARY CONTENT/APPLICATIONS	"TRADITIONAL" ONLINE SERVICE PROVIDER	CONTENT PROVIDERS
INTERNET ACCESS		INTERNET SERVICE PROVIDER (ISP)
TRANSMISSION OVER CABLE MODEM PLATFORM	TRANSMISSION OVER TELCO DIGITAL SUBSCRIBER LINE	

Shaded area is @Home Service

Shaded areas are OSP, ISP and Telco

that have characterized the field of competitive telecommunications in recent years, however. By comparison, high-speed digital subscriber line technology for telephone networks is being deployed as a pure transmission capability, with a large number of separate Internet access and content options riding on top of that basic platform.

The County's intent in establishing a nondiscriminatory or "equal access" policy with regard to the cable modem platform is to ensure that AT&T/TCI's exclusive access to the technology is not used as an unfair weapon against unaffiliated ISPs and online service providers. In particular, there is a concern that the bundling will allow an anti-competitive leveraging of AT&T/TCI's cable monopoly, and cripple the growth of competitive alternatives and consumer choice for Internet access services and online services in the County. The existing policy in KCC Section 6.27A.035 has been cited in support of this decision.

In its defense, AT&T/TCI has asserted that there are competitive alternatives to cable modem service, that equal access cannot be established because of technical barriers, that such a policy discourages investment in advanced technology deployment, and that there is no legal authority for imposing such a requirement as a condition of approving the merger or of renewing a cable franchise.

In light of this array of concerns and assertions, several different types of issues can be examined by the Expert Review Panel to assist the Council in making a final determination on the desirability and feasibility of the proposed equal access policy. A brief survey of the issues follows.

Legal Issues

There are a variety of questions about how high-speed cable modem and Internet access services fit into current federal, state and local regulatory regimes. The most prominent issue is whether the cable modem platform could be a "cable service" and therefore governed by Title VI of the federal Communications Act, or whether it is a telecommunications service subject to regulation under the common carrier provisions of Title II. If the cable modem platform is classified as a cable service, it would effectively be beyond the jurisdiction of the County under the deregulatory provisions of the Cable Act of 1992 and the Telecommunications Act of 1996. Various parties have argued that only a strained reading of definition of cable service would include high-speed Internet access and all of its component services, however.

Classification of the high-speed cable modem platform as a communications service could have profound effects. If the cable modem platform were viewed as subject to common carrier rules, provisions of the Federal Telecommunications Act of 1996 might mandate non-discriminatory access for competing firms -- just as the Federal

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Communications Commission has tentatively chosen to treat digital subscriber line services in that manner.

Case law on the legal status of the cable modem platform is currently being made. The Portland case now awaiting a decision before the United States District Court in Oregon (AT&T Corporation, Tele-Communications, Inc., TCI Cablevision of Oregon, Inc., and TCI of Southern Washington v. City of Portland and Multnomah County, CV99-65PA) -- in which a policy similar to that favored by King County is being pursued -- may influence parties' view of the sustainability of an equal access requirement. However, even with a District Court decision, the question may be unsettled in the appellate courts for some time.

Technical issues

Another group of issues concerns whether it is possible to interconnect multiple providers of Internet access or online services to the @Home network. AT&T/TCI has asserted that any interconnection would have to be made at the Cable Modem Termination System, but has suggested that the cost and amount of time to make necessary modifications to the system to accommodate multiple providers would be prohibitive. @Home has stated that difficult capacity engineering, fault recovery, number assignment, and provisioning issues would be raised by an equal access requirement. The engineering and economic barriers to such modifications are disputed by other parties.

There is an important wrinkle to the issue of the economic feasibility of providing equal access, however. Our past experience has shown that the difficulty and cost of providing access to network functions is heavily influenced by whether the architecture of the network was originally designed to accommodate multiple providers. While retrofitting hardware and software is almost always very costly, providing the capability to interconnect multiple providers up front often can be done at vastly lower cost.

Another question with technical aspects is the availability of alternative technologies which may be available to provide high-speed Internet access, such as digital subscriber line and "wireless cable". AT&T/TCI assert that substantial competitive alternatives exist. Limitations on these alternatives are partially a technical question. For example, digital subscriber line ("DSL") technology over the ordinary copper wires of telephone companies such as US West is limited to telephone lines which are not impaired by special "conditioning" or by a long distance from the subscriber to the nearest telephone switching equipment.

Longer-Term Economic Issues

There are a number of important issues of how near-term policies to effect equal access might or might not affect the incentives of AT&T/TCI and other firms to invest in advanced infrastructure. The panel might appropriately examine how alternative County policies will affect the quality, availability, and affordability of valuable new services and products to residents and businesses in the County. The County's policy choices can be seen to create a span of impacts, from immediate to longer-term -- with the longer-term impacts being less certain but likely to be greater in magnitude. The evolving downstream implications of choices must be understood as well as the obvious ones seen today. This issue is discussed at some length in the California Infrastructure Report (enclosed as comparable work sample).

Consumer Privacy Issues

In part, this set of issues arises out of a concern that private information about the consumer, her/his account and finances, Internet usage patterns, or content preferences has been collected by TCI in part under a waiver of privacy rights which the cable franchisees have routinely asked service subscribers to sign. Among the issues of concern is that the collection of such information could be a violation of existing KCC Section 6.27A.130. In addition, the continuing or expanded collection and use of such information by AT&T/TCI in conjunction with its @Home service offering poses the threat of:

- 1) Expanded breaches of privacy due to the increased breadth of information about consumer interests and revealed during use of Internet access and online services and their associated content,
- 2) Unfair and anti-competitive advantage in the provision of services beyond physical connection and high-speed transmission of data.

To address the first concern, regulators have established safeguards governing so-called "customer proprietary information" or "customer proprietary network information" (CPNI) which restricts the use of such information by affiliated service providers and provides non-discriminatory or equal access to such information for all competitors.

Use of The Expert Review Panel

All relevant issues cannot possibly be studied in the time allotted, and in fact should not be studied. The consultant must assist the Council and Panel in 1) identifying the policy choices to be made, 2) determining which limited set of issues are critical to consider to make such choices, and 3) framing the information

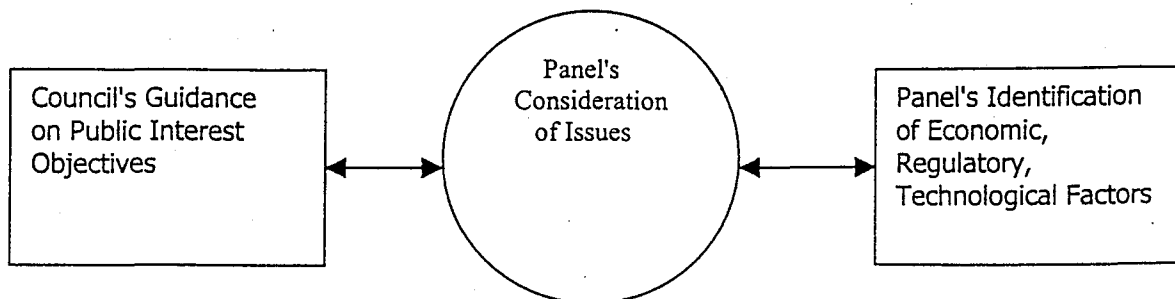
107164

developed by the Panel and the consultant for the Council in a way that is useful for practical policy decision-making. In other words, the Panel's review must be designed around the decision-making requirements of the County's policymakers - the Council. It is important that the consultant play a supportive, yet critical role in relation to the Panel, ensuring that all of the important information and factors which the Council needs to make policy choices in the public interest are articulated.

It is not uncommon that "experts" reflecting the views of various industry players are employed around contentious issues to represent several contrasting perspectives on economic, regulatory or technology policy issues, and that "locked in a room" with an opportunity to reach a negotiated settlement, such experts may achieve a consensus which does not necessarily represent the best choice for the overall public and small consumers. There is no sure way of knowing in advance how well the perspectives of a limited number of Panel members in the aggregate will reflect the full range of perspectives on issues that would best serve the public.

It may be that the Panel members alone will fully and fairly articulate all of the appropriate issues and policy choices available to the Council -- in which case the consultant's role can focus more on pure facilitation and organization of the Panel's deliberations and its recommendations. On the other hand, it may be that the Panel's composition is unintentionally biased toward one or another perspective, or may be entirely lacking in some perspective -- in which case the consultant will need to be sensitive to that problem and, in conjunction with Council representatives, will need to assert himself more to define and direct the issues that must be addressed by the Panel for its report to be responsive to the public interest of the County.

Working closely with Council representatives, i.e., the Chair and Lead Legislative Analyst of the Budget and Fiscal Management Committee, the consultant should ensure that the Council has the opportunity to consider and refine the objectives it wishes to pursue in light of issues that are brought to its attention by the Panel and consultant, and that pursuit of those Council objectives becomes an integral driver of the Panel's agenda.



B. Provide verification that the proposed personnel have the knowledge in the areas of monopoly/competitive analysis of telecommunications and/or technology sectors; regulatory practices and principles; and understanding of technical issues related to the provision of Internet services.

Monopoly/competitive analysis of telecommunications and/or technology sectors

Mr. Ting has extensive experience performing competitive analyses of telecommunications and technology markets, and evaluating issues of monopoly power and conduct in such markets. For nearly a decade at the California Public Utilities Commission, he was in charge of the telecommunications group of the Division of Strategic Planning. In that capacity, he was responsible for performing and supervising a comprehensive analysis of competitive and monopoly conditions in telecommunications and information technology products, services, and applications.

Mr. Ting's expertise in the analysis of monopoly and competitive markets continues in his role as an expert consultant and witness. He is engaged by clients in part to evaluate competitive conditions, potential or actual monopoly power, and to present recommendations for addressing monopolistic abuses.

Further, Mr. Ting's analyses and forecasts of competitive market developments during the 80s and 90s have been consistently borne out in subsequent years. A particularly relevant example is his early identification for policymakers in the early 1990s that nascent digital subscriber line technology had the cost-efficiency to become one of the major competitive factors in the high-speed access market, displacing both ISDN and fiber optic cable technologies for local distribution. At the time, telephone companies dismissed the technology as insignificant and too limited to deploy. Five years later, most of the same companies hailed its "discovery" as an innovative technology.

In addition to his economics, regulatory and public policy training and experience, Mr. Ting possesses a technology business perspective through his business management education and experience as a financial, regulatory and business analyst for a major telecommunications carrier. His professional training and networking with technology business executives over the years has allowed him to preserve an acute understanding of how competitive and anti-competitive business strategies interact with public and regulatory policies to affect market developments.

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Regulatory practices and principles

Mr. Ting has fifteen years of in-depth experience working with the key concepts to address the transition of the telecommunications and information industries from monopoly markets to competitive markets. While at the California Commission and continuing in his consulting practice, he has been involved in the definition of regulatory principles and practices for implementing "equal access", "comparable efficient interconnection", "open network architecture", and unbundled network elements pursuant to the Telecommunications Act of 1996.

For nine of those years, Mr. Ting was the lead or senior advisor to the top policymakers of a major independent regulatory agency. In that role, he provided analyses and policy recommendations on how to reform virtually all of the major regulatory practices and principles affecting the telecommunications and information service sectors to reflect changing market and technological conditions.

As an expert analyst and witness for past five and half years on economic, regulatory and technology aspects of competition issues in the telecommunications and information industries, a major focus of his work has been on the question of non-discriminatory access to local bottleneck facilities used by competing firms. He has provided counsel and/or testimony on this subject in California, New York, Texas, Connecticut, Michigan, Pennsylvania, as well as Washington.

In his consultant work as well as prior role with the California Commission, he has considered the question of applying such regulatory concepts to cable services and high-speed Internet access technologies -- whether cable-based (such as @Home) or telephony-based (such as digital subscriber line).

Mr. Ting also has several years of experience as an expert on the policy and legal issue of federal preemption of state and local regulation of telecommunications and information services, personally playing a central role in negotiations with the Federal Communications Commission and in the development of successful legal strategies, arguments, and supporting economic and technical research for a number of landmark judicial decisions preserving state and local jurisdiction, including *California v. Federal Communications Commission*, xxx F.xx xxxx (9th Cir., 1990?),

Technical issues related to the provision of Internet services

Much of Mr. Ting's work at the Commission focused on the development of advanced telecommunications and information technology markets such as the Internet access and online markets at issue here. His personal skill and expertise

at performing such analyses and drawing out their policy implications for public officials is reflected in his lead staff role in most of the major regulatory initiatives designed to foster competition and undertaken in California from the late 1980s until his departure from the Commission in 1995.

Most notably, Mr. Ting provided the staff leadership and much of the expertise for the research and competitive analysis which supported the Commission's adoption in 1993 of a competitive strategy for an advanced telecommunications and information infrastructure. That strategy was captured in a landmark report entitled *Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure*. The strategy was adopted as official policy of the State of California by the Governor and the State Legislature in 1994 and continues to this day as the foundation of regulatory strategies for restraining monopolies as well as encouraging competitive market growth.

C. List of Projects Completed in Last 24 Months

- 1999: Expert competitive analysis, cost study analysis, and support for cross-examination of witnesses in Bell Atlantic-New York Expanded Extended Loop Charge Proceeding, New York Public Service Commission Case Nos. 98-C-0690, 95-C-0657, 94-C-0095, and 91-C-1174. Contact Kimberly Wild or Hope Barbulescu, MCI WorldCom, Inc. (914) 312-6127.
- 1998-99: Expert competitive and costing analysis, recommendations and testimony in Southern New England Telephone Company Joint and Common Cost Study Proceeding before the Connecticut Department of Public Utility Control, DPUC Docket No. 98-04-03. Contact Alan Mandl (617) 261-6566 or Cynthia Carney Johnson, MCI WorldCom, Inc. (914) 312-6963.
- 1998-99: Facilitation of panel deliberations, Media Dialogue Circle, Bridging the Racial Divide Initiative. Contact Steve Costa, Oakland Sharing the Vision, (510) 238-6707.
- 1997-98: Expert analysis, recommendations and development of testimony on competitive costing models for digital switching technologies, Recurring Cost Proceeding for GTE California and Rulemaking on Open Access and Network Architecture Development, California Public Utilities Commission. Contact Stephen Bowen, Blumenfeld and Cohen, (415) 394-7500.

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- 1997-98: Expert analysis, recommendations and testimony before the State of Connecticut Department of Public Utilities on economic, policy and technological considerations in the implementation of competition in local telecommunications, including equal access to local interconnection functions and features, anti-competitive behavior in the pricing and access of such facilities by monopoly providers and the impact on choice by consumers, incremental cost of unbundled network elements. Connecticut DPUC Docket No. 97-04-10, Unbundling of Switching, Transport and Other Elements. Contact Kimberly Wild, MCI WorldCom (914) 312-6127.
- 1997: Expert analysis, recommendations and development of testimony on competitive costing models for digital switching technologies and other unbundled network elements of GTE Southwest, before the Texas Public Utilities Commission. Texas PUC Docket No. 16355. Contact Don Price, MCI Telecommunications, Inc. (512) 495-6720.
- 1997: Facilitation of group deliberations, Policy Summit on Solid Waste Management for the 21st Century, sponsored by UCLA Advanced Policy Institute and Cities of Los Angeles, Santa Clarita, Culver City, Beverly Hills, Santa Monica, West Hollywood, County of Los Angeles, Western Waste Industries, and Sanitation Districts of Los Angeles County. Contact Bonnie Spiesberger (415) 435-4062.

D. Lump Sum Cost Estimate For The Project

The following is a preliminary estimate of the cost of performing this project, as currently described. With adequate notice and appropriate consideration of costs incurred, the firm is interested in trying to respond to any changing needs and circumstances of its clients. In all instances, EST/A will endeavor to minimize the cost of this project to the County, consistent with the delivery of a high-quality service and product which supports the Council's ability to make decisions in the interest of King County residents.

Professional fees

All professional organization/management, facilitation, supporting research/analysis and report writing will be performed by Ernest S. Ting @ \$200 per hour.

Phase I -- Ramp-up -- June 7th through 3rd week of June -- 64 hrs.

Phase II -- Facilitation of panel deliberations, production of supporting analysis/research and status reports -- mid-June through late August -- 200 hrs.

Phase III -- Compilation of draft report -- mid-August to September 8 -- 80 hrs.

Phase IV -- Facilitation of panel consideration of draft, revision and completion of report, presentation to Council -- September 8 to mid-October -- 80 hrs.

Estimated total hrs. = 424 hrs. x \$200 = \$84,800

Support/clerical functions

Average 8 hrs/week from June 7th through October 8th = 144 hrs. x \$30 = \$4320.
If the County provides some of the clerical support, this cost may be offset.

Expenses

Routine telephone and office expenses will be absorbed by the consultant. At this time, it is envisioned that ordinary travel expenses (airfare, accommodations, meals, local travel) for regularly-scheduled meetings of the panel and regularly-scheduled progress meetings with the County's lead analyst will also be absorbed by the consultant.

The following expenses are expected to be billed separately:

- Express or bulk mail expense (mailings from consultant to County or panel participants), estimated at \$750
- Conference calling, if appropriate and required (with County officials or staff, or among panel participants), estimated at \$250
- With the *advance* approval of the County, the consultant may bill for extraordinary travel expenses, i.e., to attend meetings with County officials, staff, or the panel which are outside the regular schedule of deliberations, progress updates, or the presentation to the Council. Expenses only as required.

It is assumed that the County will provide space and equipment for conducting the regular meetings of the panel in Seattle, and will cover the cost of telephone calls and mailings originated by County officials and staff. Where possible and appropriate, the consultant may employ electronic mail or facsimile to reduce document handling and shipping expense.

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Follow-Up Work

The cost of any possible subsequent phase of work, including support for the Council after delivery and oral presentation of the October 8th report, is not specifically included in this estimate.

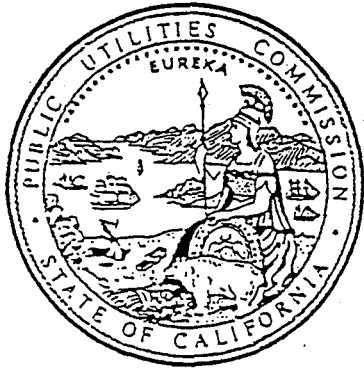
Total Lump Sum Cost Estimate

The total fees and expenses included in this estimate are \$90,120 -- including some expenses that may be offset by the County through the offer of clerical support, and excluding any extraordinary expenses.

A REPORT TO
THE GOVERNOR

107167

ENHANCING
CALIFORNIA'S
COMPETITIVE
STRENGTH:



A STRATEGY FOR
TELECOMMUNICATIONS
INFRASTRUCTURE

NOVEMBER 1993

CALIFORNIA PUBLIC UTILITIES COMMISSION
SAN FRANCISCO, CALIFORNIA 94102

A REPORT TO THE GOVERNOR

10716

*ENHANCING CALIFORNIA'S COMPETITIVE
STRENGTH:*

A STRATEGY FOR TELECOMMUNICATIONS INFRASTRUCTURE

Daniel Wm. Fessler, President
Patricia M. Eckert, Commissioner
Norman D. Shumway, Commissioner
P. Gregory Conlon, Commissioner
Jessie J. Knight, Jr., Commissioner

November 1993

CALIFORNIA PUBLIC UTILITIES COMMISSION
San Francisco, California 94102

PUBLIC UTILITIES COMMISSION

STATE OF CALIFORNIA
505 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102

107164

DANIEL WM. FESSLER
PRESIDENT

TEL: (415) 703-3703
FAX: (415) 703-5091

November 29, 1993

The Honorable Pete Wilson
State Capitol
Sacramento, California 95814

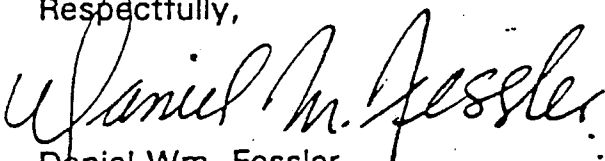
Dear Governor Wilson:

In accordance with your request, my colleagues and I are pleased to submit our proposed vision for California's telecommunications infrastructure. As you recognized when calling on us to undertake this important task, the strength and success of California's economy depend in no small measure on a world-class public telecommunications network. The vision we offer, and the strategy outlined to make that vision a reality, ensure a telecommunications future to revitalize our economy and sustain economic growth.

The benefits are clear: Establishing competitive advantage for California in an increasingly competitive global marketplace; generating new, higher paying jobs for the state's citizens as California expands its role as the next century's center of technological innovation; and, of critical importance, delivering the promise of the Information Age to all Californians.

The goals we propose are ambitious. To achieve them will require cooperation at all levels of government and among the state's many stakeholders. We believe California's consumers of telecommunications products and services expect, and deserve, no less.

Respectfully,



Daniel Wm. Fessler
President

ACKNOWLEDGEMENTS

This report was written at the request of Governor Pete Wilson. The Commission held a series of three public hearings in which participants offered their valuable perspectives on the evolving needs of the state. Agendas from the public hearings are attached as Appendix 3 of this report. The testimony provided in those hearings, along with written submissions by other parties and extensive staff research and analysis, form the basis for the conclusions and recommendations of this report. We appreciate the contributions of many individuals and organizations who provided useful information or ideas for our critical examination. The participating individuals and organizations are listed in Appendix 2.

This report was prepared under the Commission's direction by the staff of its Division of Strategic Planning. The project team for the report was led by Ernie Ting. Research on existing infrastructure and user applications was coordinated by Bob Lane, with the assistance of Steve Pangarliotas and Rob Wullenjohn. Bill Meyer and Jeff Dasovich also contributed to the analysis of issues. Brad Barnum provided generous assistance with the organization of our Full Panel Hearings. Kitty Smith assisted in the report's compilation, and all work was ultimately overseen by the director of the division, Gigi Coe.

We emphasize that this report is the result of a careful, legislative-style inquiry. Specific recommendations are attached as Appendix 1. Many of the elements of this plan will require formal review by this and other commissions, agencies and departments as well as the legislature before they can be affirmed, modified as appropriate, and given the force of law. The Commission will establish proceedings as soon as possible so this full consideration can begin.

The Commission will continue its work in this vital area, joining with leaders and experts from around the State to follow up on this plan. We invite comments and suggestions on this report. Please direct them to:

California Public Utilities Commission
Telecommunications Infrastructure Strategy
c/o Division of Strategic Planning
505 Van Ness Avenue
San Francisco, CA 94102-3298

FAX: (415) 703-4822

INTERNET: COMMENTS.INFRA.TELECOM@CPUC.CA.GOV

ENHANCING CALIFORNIA'S COMPETITIVE STRENGTH:

A Strategy For Telecommunications Infrastructure

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ENHANCING CALIFORNIA'S COMPETITIVE STRENGTH:

A Strategy For Telecommunications Infrastructure

Executive Summary

In his 1993 State of the State address, Governor Pete Wilson called for the state to take full advantage of advanced technologies to "set the stage for a California comeback." Noting the vital role that advanced telecommunications can and must play in restoring and improving the state's economic health, Governor Wilson asked the Public Utilities Commission to develop a comprehensive strategy to promote the development of an advanced public telecommunications network for California.

With this report, the Commission responds to the Governor's request and offers a statewide strategy designed to:

- *Ensure California's competitive advantage in the global economy;*
- *Foster the creation of new, higher-paying jobs for Californians;*
- *Bring the benefits promised by the Information Age to ALL Californians;*
and,
- *Continue California's commitment to universal service.*

The Vision for California: World Class Services for All Californians

Leading the Way in Innovation

Consistent with our state's tradition, we seek to place California at the leading edge of innovation in advanced telecommunications. In our view, such a goal is attainable by leveraging the state's unique competitive strengths, particularly its high-technology and entrepreneurial base. California's large size, sophisticated needs and remarkable diversity position the state to nurture new products and new markets which, in turn, will foster promising new gateways to markets in other states and abroad.

Our vision sees *all* Californians sharing not just in the benefits of today's advanced telecommunications, but in the opportunities and benefits promised by tomorrow's innovation. We envision a telecommunications future in which all Californians enjoy ready and affordable access to, and the opportunity to make productive use of, a wide array of networks which meet *the consumer's individual needs*. Our vision does *not*, nor should it, require individual consumers and businesses to use or benefit from the infrastructure in the same way.

We commend a future in which California's consumers enjoy the opportunity to exploit and benefit from interconnected networks offering the most advanced capabilities available nationally or abroad. We foresee alliances between public institutions and private firms, greatly enhancing the ability of consumers with more modest needs to use high-quality, low-cost telecommunications in new and yet unimagined ways. Building on policies of maximum access and consumer choice, users can make use of contemporary and future advances in telecommunications for an almost limitless array of activities: telecommuting; mobile communications; delivering and receiving essential services; making more efficient use of energy in the home and in business; providing health care; retrieving and sharing a vast wealth of information quickly and cheaply; continuing education in the school and home; personal business management; entertainment; and a host of others.

The Benefits Are Substantial

Advanced telecommunications offers California the opportunity to gain competitive advantage in the global marketplace. That advantage will strengthen our economy and create tens of thousands of jobs. Expanded use of telecommunications will create new products and services, new businesses, new job opportunities and could increase the productivity of the state's businesses by billions of dollars. These economic benefits will significantly enhance the state and local revenues necessary to deliver vital social and community services.

Many of the benefits will flow beyond the private sector to enrich our educational system; the health care sector; libraries; public safety organizations; and other important institutions. Telecommunications promises to make government more efficient and responsive by doing more with less, by easing access to government programs and services, and by shifting focus toward a more consumer-oriented approach. Equally important, public sector agencies and non-profit organizations can exploit advanced telecommunications to develop new and valuable services that would otherwise not be possible using traditional methods.

Our strategy recommends specific, near-term actions to promote:

- ***Distance Learning*** to allow students anywhere in the state to learn from teachers with specialized expertise via two-way video links to the classroom or the home;
- ***Telecommuting and videoconferencing*** to improve business productivity, ease congestion, and improve the state's air quality;
- ***Remote medical monitoring*** to expand access to, improve the quality, and lower the cost of health care especially to remote areas of the state;
- ***Interactive design and manufacturing techniques*** to enhance industrial productivity and stimulate job and economic growth;
- ***Remote energy management*** services which combine telecommunications and energy technologies to allow energy consumers to better manage their energy bills, and electric utilities and other energy service providers to offer service more efficiently;

- **Multimedia information and entertainment** to allow Californians to participate more fully in our society and enrich their lives.

Begin Pursuit of the Vision Today

Assembly Bill 1289 (Moore), signed into law this year by the Governor, specifically directs this Commission to begin proceedings as soon as practicable to consider an infrastructure strategy for the state.

Californians can begin to enjoy the benefits of our vision within the next year if we commit today the resources necessary to enact the strategy proposed in this report. Fundamental regulatory reform and streamlining represent two of the principal components of our strategy; each promises considerable benefits and proceedings can begin immediately.

Comparably important is the clear message our vision and accompanying infrastructure strategy seeks to convey: *California intends to shape policy with the specific intent of expanding private-sector opportunities within the state for new investment, new businesses, and new jobs.* This report offers recommendations designed to support that message with the actions necessary to help secure California's economic comeback.

Finally, outlined below are additional recommendations intended to further transform regulatory policy by the end of 1996. When enacted, these changes promise to unleash and foster the competitive forces and entrepreneurial energy necessary to accelerate the arrival, sustain the development, and extend the reach of the Information Age for all Californians. As we approach the turn of the century, these steps will lead to still greater benefits by ensuring that advanced telecommunications form an integral part of the state's economy and its society.

Principles Guiding the Vision: Innovation, Diversity and Access

Innovation, diversity and access comprise the foundation on which our proposed strategy is built:

- *Above all, encourage relentless innovation in the ways advanced telecommunications is provided and used in the state.*
- *Support a diverse mix of services and products to meet the widely-varying needs of California businesses, individuals and communities.*
- *Increase affordable access to, and with it the value of, telecommunications with policies which:*
 - Commit to a level of universal service which keeps pace with current and future technological changes in the industry;
 - Require all public networks to be linked to form an integrated infrastructure for California;
 - Encourage applications designed to meet a wide range of individual consumer and business needs;
 - Establish the California Telecommunications Task Force to assist the Commission to devise and implement the means necessary to bring appropriate telecommunication technologies and services to our schools, libraries and community centers.
 - Promote aggressive information sharing and education and training programs designed to reach beyond the technologically rich sectors of our society to the state's disadvantaged populations.

Why this Strategy?

The State's infrastructure strategy must be flexible to endure and adapt to continuous change; must be comprehensive in scope; and must build upon California's inherent strengths.

- *California's telecommunications infrastructure strategy must be flexible enough to survive, and indeed encourage, rapid change in both the types of technologies used and the ways in which consumers choose to use them.*

The telecommunications industry is and will continue to be subject to a punishing rate of technological innovation. Recognizing the difficulty of "predicting" futures under these conditions, this Commission rejects an interventionist approach to infrastructure development based on micromanagement or command-and-control regulation.

In testimony provided at public hearings and in material submitted to the Commission, most experts suggested that any attempt by government to mandate a "one-size fits all" approach risks hobbling the state with stranded or inferior facilities. The infrastructure strategy proposed here looks principally to the competitive forces of the marketplace as the driver and minimizes the potential for publicly funded infrastructure to burden California's consumers, and the state's economy, with the costs of uneconomic or obsolete investment.

For this reason, our strategy relies principally on the discipline and capital of private markets and investors to grow the most competitive, high value technologies for California. Recent announcements by Pacific Bell outlining their plan to offer residential video service, and cable companies interest in telecommunications build upon and reinforce this strategy.

This being said, the Commission will not stray from and remains resolute in its paramount obligation to protect the state's consumers of telecommunications services, particularly in those sectors where market forces remain weak or monopoly power persists.

- ***California's telecommunications infrastructure strategy must look beyond simply building technically sophisticated networks and focus as well on the importance of affordable applications, low-cost customer equipment and consumer education and training.***

For many consumers, the dearth of applications and affordable equipment, inadequate knowledge of how to use these applications, and a poor understanding of their value represent major obstacles to the use of advanced telecommunications. We will not overcome these hurdles solely by increasing investment in network technology. Indeed, consumers will reap real *value* from telecommunications when advances occur on all three fronts: 1) Networks

possessing adequate technical capabilities; 2) applications consumers value; and consumers knowledgeable of the applications and networks available, and 3) how to use them.

Our strategy attempts to bring these elements together to ensure that network investments in California bring high value uses and the attendant benefits to consumers rapidly, rather than result in idle infrastructure.

- *To best strengthen and sustain its competitive position, California's telecommunications infrastructure strategy must leverage the state's inherent strengths and distinguish itself from other states and nations.*

California must not rely on a strategy whose goal is merely "to do more of what others are doing." California enjoys a rich and distinctive resource base. Accordingly, the state's infrastructure strategy must build on and match those characteristics, for this is the basis on which to establish sustained competitive advantage.

Getting the Job Done: Strategic Steps to Fulfill the Promise for California

Success, and California's economic revitalization, requires cooperation among this Commission, the Governor's office, the California Legislature, individual and business consumers, telecommunications providers and the countless other stakeholders present throughout the state. Consistent with the principles outlined above, we recommend that the California legislature and agencies pursue the following actions. Recommendations directed to this Commission require formal review and consideration before taking effect.

1. **OPEN ALL MARKETS TO COMPETITION AND AGGRESSIVELY STREAMLINE REGULATION TO ACCELERATE THE PACE OF INNOVATION.**
 - Initiate reforms to release firms currently subject to Commission regulation but which lack market power from unnecessary regulatory

burdens restricting competitive innovation. This action would free the vast majority of providers from unproductive regulation.

- Eliminate, within the next three years, all remaining legal barriers to competition for telecommunications services in the state.
- Transform universal service from the current complex system of subsidies built around a monopoly provider to a program which allows a wide range of providers to compete directly to deliver such service.
- Streamline and better focus regulation to protect consumers more effectively from remaining monopoly power and marketing abuses while eliminating unnecessary costs of doing business in the state.

2. CREATE THE NATION'S LARGEST ALL DIGITAL, VIDEO AND MOBILE MARKETPLACE.

- Expand basic service to include optional digital access; make such access available to all Californians by January 1, 1997.
- Encourage the development of switched video and mobile access throughout the state by the end of the decade.
- Create a Commission-sponsored industry forum to set minimum quality and compatibility (interoperability) standards for firms offering expanded basic service, and to coordinate with national and international standard-setting organizations.
- To the maximum extent possible, maintain a technology-neutral policy. Emphasize "performance standards" over technology-specific standards to allow telecommunications providers to tailor their use of technology in a manner which best meets their needs.
- Work with the Legislature, the Department of Consumer Affairs, the Attorney General's Office and other appropriate agencies to ensure that fundamental consumer protections are in place.

3. ENCOURAGE COORDINATION TO ELIMINATE BARRIERS PREVENTING THE USE OF ADVANCED TELECOMMUNICATIONS.

- Encourage business to create private-public partnerships to help consumers make better use of advanced telecommunications. These partnerships could:
 - a) Make low-cost customer equipment available to different types of consumers;
 - b) Train consumers about the types and value of different applications; and,
 - c) Make network services more easily accessible.

These partnerships should emphasize flexibility, speedy trials and widespread distribution of trial results.

- Establish centers, with joint participation by the State and the private sector, to showcase advanced telecommunications applications of value to business. These centers would serve as an information clearinghouse and demonstrate new services, equipment and applications available from a variety of vendors. Potential users would have the opportunity to test different applications in "hands on" demonstrations, and receive education and training.
- Establish a user forum at the Commission to assess the advanced telecommunications needs of business and community users, and how they may be better met through the state's public infrastructure.

4. DIRECT ALL STATE AGENCIES TO LEAD BY EXAMPLE.

- Create an interagency group to examine the potential for making government more efficient through the use of advanced telecommunications. Examples designed to increase public sector efficiency include, but are not limited to, electronic access to public

documents, electronic document filing, and videoconferencing to reduce the costs, including environmental costs, related to travel.

5. REINVIGORATE CALIFORNIA'S SCHOOLS AND LIBRARY SYSTEMS.

- Promote the use of advanced telecommunications by all California primary and secondary students and public libraries through a Schools and Libraries Information Technologies Grant Program providing up to \$150 million annually. The Grant's objective: to provide additional funding for planning, training and equipment to spur statewide development of valuable applications throughout California's K through 12 school and library systems. This modest amount of "seed" investment will foster demand for services and products in the home and in our communities, thus promising to bring the benefits of advanced telecommunications to Californians more rapidly.
- Establish as soon as feasible the California Telecommunications Task Force consistent with Senate Bill 600 (Rosenthal), signed into law by the Governor in 1993. The task force will assist the Commission to devise and implement the means necessary to bring appropriate telecommunication technologies and services to public institutions such as schools, libraries and community centers. The task force will be comprised of individuals representing communications technology and service providers, schools, libraries and community centers, as well as other pertinent stakeholders.

CHAPTER I

A Vision for California's Telecommunications Future

As we approach the 21st century, our vision for California's telecommunications infrastructure and its use of advanced telecommunications includes four objectives:

1. ***A California in which businesses enjoy heightened productivity by choosing freely from a rich menu of improved telecommunications services and products, ranging from basic telephone service to the most sophisticated high-speed services.***

If achieved, this objective promises to improve California's competitiveness in national and international markets, spur job growth and increase the quality of employment opportunities.

2. ***A California in which consumers enjoy the benefits of greater choice among higher quality, lower cost telecommunications products and services which respond to the diverse demands of the state's growing population.¹***

The array of tools and information offered by advanced telecommunications promises to empower Californians with the skills and the potential to better their standard of living, and as a consequence, the state's economic position.

3. *A California in which telecommunications increases access to, and lowers the cost and improves the quality of vital services, such as education and health care, for all.*

4. *A California in which the people of the state, regardless of social or economic circumstances, enjoy ready access to, and knowledge of, the fundamental telecommunications services necessary to participate in the changing social and commercial fabric of the state.*

Our objectives are simple; their achievement is fundamental to California's sustained economic vitality. Success requires that the State work cooperatively with and unleash the private sector to ensure that every Californian is able to access the Information Age. Our examination indicates that California is currently well-positioned to meet that challenge. The strategy we offer here is designed to ensure that California is positioned so that the state's businesses and each of its citizens has the opportunity to realize the substantial benefits of telecommunications as we enter the 21st century.

Infrastructure for an Information-Based Economy

Advanced telecommunications uses computer processing to expand network capabilities. Where conventional telecommunications once carried voices from one location to another, advanced telecommunications now taps the growing power of computing to transmit greater volumes of information over networks, to alter information into a form desirable to consumers, and to store information in enormous data banks.

Computer processing generally involves what is referred to as "digitalization," the translation of audio, video, graphical and text information into the binary language--the so-called "zeros and ones"--of computing. Digitalization is the engine driving the convergence of telecommunications, computing and the media of broadcasting and publishing.

The focus on advanced telecommunications networks by business, government, and community leaders recognizes the dramatically expanded role

electronic communications plays in the way commerce is conducted. California's business community has been among the first to tap the power of modern networks through internal business applications. The growth of sophisticated "electronic highways," over which financial transactions are processed, electronic mail is sent, data bases are shared, cable television is delivered, and cellular telephone services are rendered, will expand to all sectors of society and further transform California's economy. Advanced telecommunications networks promise to play an increasing role in the daily lives of each Californian.

The astounding capabilities of advanced telecommunications technology will permit Californians to share information and ideas instantaneously with businesses and individuals across the country and around the globe. Whether in the form of audio, video, raw or processed data, the power to obtain and convey information quickly and conveniently creates opportunities to develop new services and products hardly imaginable only a few years ago. The capabilities are vast, yet the potential value of their use remains limited since many individuals and organizations have only begun to understand, adjust to and exploit these possibilities. With the ever-expanding array of available applications broadening at a breathtaking rate, it is currently popular to refer to our telecommunications resources in their entirety as a vital and integral part of our economy's "infrastructure."

California will foster and maintain the superior skills required to enhance California's standard of living and quality of life *only* when consumers of all kinds, including businesses, individuals, schools and government, enjoy ready access to information, and when the telecommunications infrastructure is there to support that access.

The Benefits of Advanced Telecommunications

Participants at our full panel hearings generally agreed that the "telecommunications infrastructure is a critical factor in both the economic success and the quality of life of California."² John Young, Chair of Smart Valley Inc, and retired CEO of Hewlett Packard told us that the information infrastructure represents an engine for economic competitiveness and job creation. Equally important, Mr. Young noted that telecommunications can help us achieve vital social objectives.³ A National Telecommunication and Information Administration

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(NTIA) investigation of infrastructure policies exhibited a similar enthusiasm about the ability of the telecommunications infrastructure to play a critical role in improving both the welfare of Americans and the competitive position of U.S. business in the global marketplace.⁴

We agree. With respect to California, advanced telecommunications has considerable potential to offer additional significant benefits. Specifically, these products and services can assist to:

- Improve the competitiveness of California businesses;
- Improve the quality, availability and affordability of health-care;
- Improve the quality and lower the cost of education;
- Increase the efficiency, effectiveness and responsiveness of government;
- Reduce traffic congestion and improve air quality; and,
- Bring exciting new opportunities for knowledge, entertainment, and convenience to Californians.

The strategy we offer builds on the basic components of the vision outlined above, with the intent of fostering a telecommunications infrastructure which forms the foundation on which:

- Innovative telecommunications providers located in California, around the country, and abroad invest in and experiment with innovative technologies, bringing with them high-value services, products and jobs to the state.
- Students have electronic access to a wide variety of information, and individuals of all ages enjoy affordable and ready access to schools, teachers and courses from their homes and businesses, thus enabling lifelong learning.

- Through the use of telecommunications which links home and remote worksites to offices, factories and other places of employment, individuals have the opportunity to choose among a variety of places to live without foregoing opportunities for productive and fulfilling employment.
- Commuters see their travelling times shrink or vanish, thereby reducing traffic congestion, improving air quality, and allowing employees more time for family, community and other interests.
- Disabled Californians overcome physical barriers and enjoy increasingly productive lives.
- Rural and remote consumers, electronically linked to employers, schools, health-care providers, businesses, government agencies and sources of entertainment and information, no longer face the potential limitations brought on by distance from urban centers.
- Government agencies exchange information electronically with other agencies, businesses and individuals increasing efficiency, reducing paperwork and improving service.

Our vision is ambitious. Yet we believe such ambition is consistent with California's tradition. In the remainder of this report, we consider the specific strategic steps necessary to realize this vision for the state.

CHAPTER II

Principles to Guide the Vision

Billions of dollars are currently spent annually on telecommunications infrastructure in California. We agree that enhancing California's competitive position should be a goal at the core of any telecommunications strategy, particularly to the extent that massive additional investments in telecommunications infrastructure are contemplated. However, we must begin with a clear understanding of the basis on which California can enhance its competitive standing. Only then can we be assured that any steps taken work to California's competitive advantage and do not represent "empty" investments made in times of hopeful enthusiasm. We literally cannot afford policies based on a simple "throw more money at the infrastructure" approach.

We offer three principles designed to guide the development of infrastructure and advanced telecommunications. They arise from the pursuit of competitive advantage, an understanding of the basic features of the advanced telecommunications industry, and clear recognition of California's distinguishing strengths:

1. Foster relentless *innovation* in the delivery and use of advanced telecommunications.
2. Promote *diversity* in the range of choices among services and providers.
3. Ensure affordable, wide-spread *access* to California's public networks and the resources tied to those networks.

Innovation: California must reward innovation. We recommend that all state agencies work together to examine state policies which either directly or indirectly affect competitive innovation in telecommunications. As part of their review, agencies should take the steps necessary to: 1) align incentives embodied

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in their policies to encourage innovation and facilitate experimentation⁵; 2) remove unnecessary barriers to the introduction of new services and products; and, 3) streamline regulations governing telecommunications products, services and related applications.

Diversity: California must foster consumer choice in the market for services and products in order to most effectively meet the diverse demands of California businesses, residences and community institutions. As such, policies should promote an infrastructure characterized by a "network of networks," or, in the words of Francois Bar and Michael Borrus of the University of California Berkeley Roundtable on International Economy (BRIE), a "network portfolio" designed to reduce the overall risk to Californians from the technological and market uncertainties inherent in a changing market for advanced telecommunications.⁶ Equally significant, pursuing this strategy will facilitate the broadest and most valuable array of applications for California firms trying to compete in regional, national and international markets.

Access: California must encourage providers to make their services and products readily accessible and affordable to the greatest number of consumers in all sectors of society. California must continue to promote universal access to essential telecommunications services and encourage the development of interconnection arrangements to increase the value of all communications networks.

Sources of Competitive Advantage

There are several key points which must be considered before selecting an infrastructure strategy that will enhance California's competitiveness.⁷ These key points include:

- A state gains a competitive advantage when its businesses and other sectors of its economy are *more* productive than the economy of other states. California can gain a competitive advantage in a particular industry by being more productive -- producing goods and services at lower cost or of higher quality -- in that industry.

- When a state has superior productivity, and consequently a competitive advantage, it attracts business and jobs.
- In an industry subject to a high rate of technological and market change such as telecommunications, achieving a competitive advantage is not as significant as retaining it over time. A state can retain a competitive advantage in an industry by innovating *continuously* so it stays ahead of imitators. It can also play to its unique strengths, characteristics that other states cannot readily duplicate.⁸
- In summary, a state gains a competitive advantage over other states, and a nation gains a competitive advantage over other nations, because of differences in its resources compared to other states and nations, and how it takes advantage of these resources to improve productivity.

Michael Porter, a prominent researcher on competitive advantage, articulates a number of principles for government policy in particular:

[C]ompetitive advantage grows out of the capacity ... to improve and innovate relentlessly. Old advantages are eventually duplicated or obsolete Policies that convey static, short-term cost advantages but that unconsciously undermine innovation and dynamism represent the most common and most profound error in government policy toward industry. In a desire to help, it is all too easy to adopt policies such as sanctioning joint projects that avoid "wasteful" R&D, or approving mergers that allow efficiencies in corporate overhead but eliminate domestic competition. These sorts of policies, and many others that governments have adopted, usually defer, delay, or eliminate the perceived need to improve and innovate, or send the wrong signals about where to innovate.⁹

These points contain the seeds of the infrastructure strategy the Commission recommends for California. In particular, we emphasize the need for a telecommunications policy to support continuous change and innovation. We

reach this conclusion because the nature of competitive advantage requires it, and even more so given the exceptionally transitory nature of technological advantage in the telecommunications industry.

There is a "chicken and egg" dilemma to developing many advanced telecommunications markets which underscores the need for policies that adapt well to unforeseeable change. Which should come first -- the investment and development, or the demand? Since, by definition, there is no history on which to forecast demand for services which address new markets, investors in advanced telecommunications are often forced to proceed on several fronts with no advance knowledge of which new services will be met with positive consumer reaction. Moreover, the process of convincing business, community and individual consumers of the value from new technological capabilities is a complex and often subtle one where skill at marketing and developing "user-friendly" applications may be more crucial than technological capability.

Implications for a California Infrastructure Strategy

California is the largest, and in many respects, the most diverse state in the Nation. Thirty-five million residents inhabit its one hundred thousand square miles representing some of the most highly-educated, and lamentably, under-educated segments of the population. In addition, California is home to one of the largest immigrant populations in the country. Commerce in California extends from advanced, high technology fields to labor intensive agriculture. The creative energy and cultural diversity of the state's indigenous markets offer fertile ground for growth in the creation and delivery of innovative goods and services, at home and abroad.

By design, the guiding principles we offer accentuate California's inherent strengths. California's immense size and diversity, both of which are positive attributes in the rapidly changing world of telecommunications, also persuade us to counsel against a "command-and-control" telecommunications strategy.

First, command-and-control planning rarely, if ever, works well amidst the immutable market forces of the sort currently underway in telecommunications.

Second, the breadth and scope of central planning and coordination necessary to respond to the immense diversity of consumer demands make this approach far more difficult in California than would be the case in other, more homogeneous states.

Third, command-and-control planning is incompatible with the astounding rate, vast scope and unpredictable nature of technological innovation within the telecommunications industry. The state of the art in telecommunications technologies are evolving so rapidly that recent advances are quickly eclipsed. This presents a hostile environment for conventional command-and-control government planning.

Finally, a command-and-control style telecommunications strategy would put California greatly at odds with the evolving policy direction at the federal level, where the shortcomings of such an approach have been recognized for some time.

By contrast, California's preeminent high-technology base and its entrepreneurial talent place the state in the enviable position of leveraging rapid private sector innovation as an engine of competitive advantage. What is more, California's diversity and growing demand can be to the state's *advantage* if it provides an environment in which in-state firms can nurture new markets well before other states and nations.

In sum, California's strategy must consciously and aggressively parlay its native strengths of diversity and growing demand into competitive advantage. As Porter correctly notes, gaining competitive advantage depends more on differentiating oneself from others, than on merely imitating. Moreover, if California hopes to *sustain* competitive advantage, its strategy must build on the state's many, varied, and unique strengths. The guiding principles discussed above adhere strictly to these notions.

CHAPTER III**Specific Policies to
Encourage Innovation and Competition****Toward Open Markets**

The guiding principles outlined in the previous chapter and the unique characteristics of California call for a vigorously competitive market. It is therefore essential that California's telecommunications-related markets be open to competitive entry. Unnecessary government protection and restrictions dampen the prospects that new products will come to market and that consumers will receive their attendant benefits.

If California is to be known as a state that welcomes and rewards competitive innovation, the state must commit to open markets, without relinquishing its obligation to effectively oversee firms that continue to retain market dominance during the transition, nor without relinquishing its commitment to universal service and consumer protection. Expanding market opportunities will accelerate the development of competitive alternatives even in segments of the market seemingly devoid of entrants at present, thus expanding the range of technologies, products and services available to Californians.

This being said, State policy and the Commission must continue to ensure that all Californians have the basic means of communication traditionally provided by the local telephone company. We address in this report how we intend to achieve that goal. To expand, not simply to preserve existing social benefits, we must secure and sustain the future economic health of the state. Planning today for tomorrow's fully competitive environment will help us do so.

As such, we propose to focus state regulatory oversight of telecommunications service providers on two principal objectives:

- Protect against unreasonable prices or restrictions on access to the networks by firms that continue to dominate local telecommunications markets; and,
- Protect against the potential for fraud and similar abusive practices that accompany a highly competitive market.¹⁰

While ensuring against abuses, we must simplify the way we regulate firms which still retain sufficient power to dominate the market. We will maintain rate ceilings to ensure consumers seeking access face reasonable prices where competition is absent. We agree with many witnesses at the hearings who indicated that open access to local telephone company networks is critical to the development of California's telecommunications infrastructure.¹¹ We will therefore continue to develop rules and policies requiring dominant firms to provide open access to other firms who need such access in order to offer services.

With appropriate statutory flexibility in place, the Commission can refocus its regulatory oversight in favor of consumer protection and affordable access to the network. Firms who do not enjoy market power should be free from traditional entry and pricing regulation. Where healthy competition exists, no significant purpose is served by continued government intervention. We believe aggressive streamlining of regulation will lower the cost of doing business in the state and shorten the time required to introduce new services.

In order to foster a fully competitive local telephone market, the Commission must work with federal officials to provide consumers equal access to alternative providers of service. To do so, the industry must overcome technological barriers such as the ability to provide "local number portability" -- the ability to keep your telephone number even if you change local providers.

Expanding market entry, thereby increasing the number of service providers, will undoubtedly pose a challenge to consumers. Achieving the benefits of competition requires effective consumer education programs. Moreover, state and local agencies must work cooperatively to establish programs which protect

consumers from the marketing abuses that may occur in a highly competitive market.

To protect consumers, interagency cooperation should have as its principal focus: 1) to develop disclosure rules necessary for consumers to make intelligent choices among an expanding range of technology and service options; 2) to ferret out unacceptable sales practices; and, 3) to assure that aggrieved consumers have avenues available to seek relief. Government agencies should substitute government intervention with cooperative efforts by enlisting the assistance of consumer groups and industry associations.

Community and industry representatives suggest that the Commission should permit local initiatives designed to test new or different approaches to telecommunications infrastructure development.¹² We believe the notion of designing state policies to preserve local flexibility where possible is reasonable and worth exploring. We urge other state agencies to consider, as appropriate, local flexibility when developing specific policies to implement the overall strategy we propose.

These experimental test zones, or "regulation-free zones," would not be free, however, from the need to protect consumers. Establishing zones would also require substituting new rules for existing ones. As such, a more precise label for these might be "open competition zones." Chief among the restraints to remove are "the regulatory and legal barriers that currently prevent most forms of competition in the local exchange market; "in short, the local telecommunications market."¹³

The effect of the combined proposals in this plan are to make the state of California an "open competition zone," rather than to focus on one region. Yet, in the interest of pursuing the means necessary to ensure the state realizes the benefits of early competitive innovation, we encourage any proposals for "open competition zones." However, the zone proposal requires us to look at many of the same, and some new issues, likely to arise from the permanent and statewide opening of competition we recommend here.¹⁴ We urge proponents to seriously consider the question of whether establishing temporary open competition zones will have advantages over focusing our efforts on establishing a statewide approach.

Toward Standards for Integrating Multiple Networks

We believe a "network of networks" best characterizes the technological vision we seek through a competitive market structure. We arrive at this view from the understanding that, to accommodate different types of providers, some services and providers may connect through a common network, while others will require separate networks for different services. For example, the most effective way to deliver state-of-the-art services to sophisticated users may be through specialized or customized networks. Still other users will not require such specialized networks, yet widespread availability of basic telecommunications capabilities, referred to as "connectivity", is essential.

Assuring broad accessibility to the resources of California's public networks -- our third guiding principle -- is of primary concern where a large number of separate networks may be involved. Many witnesses at the Commission's hearings urged us to direct our attention to the interconnection and interoperability of multiple networks.¹⁵ Our policy will require interconnection and encourage a minimum level of interoperability among all the networks available to the public. We will not impose network-specific standards. However, we will review specific rules to ensure network reliability and security, to ensure the network can be used on a common basis.

Ensuring common carriage prevents firms from denying access or giving preference to affiliates or subsidiaries. However, users' ability to send messages they choose may be limited by technical capabilities of the network, and by applicable laws. Dedicated private networks that distribute a particular firm's information services will not be subject to common carriage requirements since they do not provide the same open conduit for the exchange of information that a public telecommunications network provides.¹⁶

As the number of service providers increases, the reliability of each network and its ability to interconnect with the public network becomes increasingly important. In addition to the usual service quality standards, we will require each firm participating in the public network to establish plans to reroute service, or direct its customers to alternatives, should its network fail. We will also routinely examine both the integrity of the interconnected public network and the security of information it transmits. To ensure network reliability and security, we will,

wherever feasible, coordinate efforts with national organizations responsible for setting standards.

Toward a Progressive Expansion of Basic Service

Traditionally, basic service has referred to the group of telecommunications services that enjoy special status as essential for all Californians. With legislative guidance such as the Moore Universal Telephone Service Act of 1987, the Commission sets the availability and pricing of basic service to ensure that the greatest number of Californians receive it.

Many participants in our hearings suggested expanding the definition of "basic service." Some proponents of expanding the definition of basic service suggest including some form of basic digital access, such as that provided by Integrated Services Digital Network (ISDN) services, as a basic service. Doing so would provide all Californians with the ability to enjoy multiple phone, fax or other combinations of telecommunications services over a single line to the home.¹⁷

In the past, some commentators have gone further and advocated the immediate deployment of broadband capabilities, providing very high capacity services to every individual in the state. Proponents of this definition envisioned fiber optic cable transmission facilities to every California home and business at a cost which could approach tens of billions of dollars.

As advanced telecommunications becomes an increasingly integral part of interactions among individuals and businesses within the state, the definition of basic service ought to expand to ensure that all Californians enjoy the opportunity to participate fully in society and none is left behind in technology's wake. We propose to redefine basic service so that it may evolve over time as these expanding needs become more evident.

In so doing, we intend to refrain from specifying a particular technology, or adopting definitions which favor particular service providers however. This approach is consistent with the technology- and provider-neutral approach proposed in our open competition policy. For this reason, we decline to adopt any form of ISDN as part of an expanded basic service definition. Specifying ISDN

would necessarily favor a particular technological design and telephone companies over other innovative firms.

At this time, we also decline to incorporate broadband capabilities into a basic service definition. As we discuss further in Chapters V and VI, most existing applications of advanced telecommunications can be handled without broadband. Further, with recent developments in compression and "digital signal processing" techniques which offer dramatic gains in the efficiency of transmitting digital signals--it is possible to deliver over existing copper lines many services that previously required new broadband capacity--saving billions of dollars for more cost-effective infrastructure investment. Rather than rely on a government-mandated deployment schedule, we favor policies that clear the way for private firms such as telephone companies, cable companies and data network firms to make broadband capabilities available around the state as soon as appropriate technological and marketplace conditions warrant.

We propose a policy toward the expansion of basic service that balances the risk of drawing premature conclusions about the utility of new services with a concern that no segment of California's consumers be left behind in the need for vital telecommunications access. For the time being, we intend to be flexible about the particular level of transmission or processing capacity needed throughout California.

We propose to focus on and establish objectives for the types of telecommunications capabilities we wish to encourage throughout California. We specifically propose to establish a policy defining some fundamental level of digital capability that should be made available throughout the state by 1997, and a level of video and mobile capability that should be made available statewide by the end of the decade. These standards can be expanded over time as demand grows and costs decline. Basic capabilities are necessary to allow all consumers to learn by doing. Moreover, consistent with our desire to test possible solutions against real-life situations, a modest initial expansion of the basic service definition will permit us to see what new, useful applications arise from basic digital, video and mobile capabilities.¹⁸

Observing the initial results of the open market policies we propose will permit us to identify new functions to include in the definition of basic service. This experience will enable us to understand what new uses are, in fact, valuable

to most Californians. Additionally, it will allow us to see where Lifeline assistance or broader subsidies, if necessary, might be required to ensure that all Californians have the opportunity to participate in the new network.

A Two-Tiered Basic Service Approach

Coinciding with the opening of all markets to competition on January 1, 1997, we propose to adopt a new two-tiered approach designed to manage the transition toward a redefinition of basic service. In the first tier, conventional *voice* telephone service would be offered by competing firms. The Commission would continue to oversee prices for first-tier basic service pending the emergence of a fully competitive market in this area.

We propose to add an optional second tier, basic digital access, to the definition of basic service. Since most new telecommunications products and services require digital capabilities, we propose to begin work on defining a common foundation upon which companies can test new telecommunications products and services. With this common digital foundation, we can learn which products and services competing providers voluntarily market, and which among those consumers find sufficiently valuable to purchase.

Specific regulatory treatment of the second tier would evolve. At first, the Commission would work with a consumer/industry forum to develop a common, but technology-neutral, definition of the minimum technical capabilities which should be available throughout California by 1997. Firms would be permitted to charge a separate price for second-tier service as it grows from a service initially used by a small proportion of consumers to a large and vibrant market. We expect to keep prices low by assuring that second-tier service--which is crucial to the interests of many businesses who wish to market new products and services throughout California via digital lines--is immediately open to competition.

As competition for second-tier service among private firms fosters the deployment of basic digital capability around the state, the Commission would monitor deployment and usage patterns. If geographic or other significant gaps occur and persist, we would consider the possibility of offering targeted subsidies to any competing firms willing to close them.

When a major portion of California's individual and business consumers find value in and uses for second-tier service, and digital access has become a common method for doing personal and commercial business, the Commission would also consider expanding Lifeline support to cover second-tier digital service. In this way, California will assure that the state does not slip into a "have and have not" society in vital telecommunications services.

We will encourage competing firms to extend their digital transmission capacity to support multiple channel and two-way video services for all California homes and businesses who choose these services. Telephone companies can use existing technologies, such as Asymmetrical Digital Subscriber Line (ADSL) to provide this multiple-channel, entertainment-quality video capability over existing copper lines, or may elect to deploy combinations of new and existing technologies. Cable network operators can adapt their coaxial cables which currently pass nearly all California homes to do the same. Cellular and other radio networks can also provide basic digital access.

We propose to remain neutral on the question of whether firms providing basic digital access should use networks separate from or combined with other voice, video or mobile networks. In this way, competing firms may use the most cost-effective portion of existing facilities, new technologies or both. However, we will require interconnection among all participating second-tier networks serving the public so that a consumer connected to a second-tier service may reach any other consumer of second-tier service in the state.

In pursuing widespread access to California's public networks, we also intend to address the varied demands of the diverse segments of the public. In particular, we will seek to establish standards for access that do not inadvertently deprive individuals with disabilities access to the Information Age. For example, as some experts have noted, many scenarios of future networks focus on video display capabilities, potentially raising new barriers for visually-impaired Californians.¹⁹ We will expect the consumer/industry forum to address these types of access-related issues at the outset to minimize the need for expensive *ad hoc* solutions later on.

The Longer-Term Objective

We also propose a longer-term objective: *To achieve statewide access by the end of the decade to full-motion switched video and mobile communications capabilities.* We do not propose to include these capabilities within our expanded definition of basic service at this time, but will consider adding them to the transitional second-tier at a future date. These two types of telecommunications capabilities are subject to an enormous amount of technological change. Switched video is not as developed as basic digital access, and mobile capabilities are being fundamentally restructured to account for major changes in radio spectrum availability underway at the federal level.

We therefore plan to pursue this longer-term objective by relying first on our open competition policy, thereby encouraging competing firms to foster the widespread development and use of these advanced technologies in the California market. As we monitor the constant competitive market and technological progress that will swirl around switched video and mobile for the next few years, we will keep them in mind for possible future inclusion in an evolving basic service definition for the 21st century.

Toward Competitive Basic Service

Many policymakers, industry analysts and consumer representatives have reached conclusions similar to ours. We see this in their advocacy of a competitive telecommunications market structure, or in their acknowledgment that competition cannot be forestalled much longer. The hurdle we have yet to leap is how to reconcile the increasingly competitive nature of the industry with the existing system of subsidies to support universal service.²⁰

We harbor no illusions that reformulating the current system will be simple; nor do we wish to abandon support for universal service. However, the current system is arcane and complex because of the "bandages" that have been applied over many decades. It is impossible to understand fully how the current system influences innovation and efficiency. The Commission has moved monopoly rates steadily closer to the true cost of service wherever possible without jeopardizing universal service. However, imposing outmoded regulations and unequal burdens on modern telephone companies and their emerging competitors discourages

competitive innovation. Moreover, such treatment may invite high-cost, less competitive firms to enter markets solely because of artificial price umbrellas maintained by hidden subsidies.

Clearly, in the inevitable transition to full competition, nothing should compromise the goal of universal service, including affordably-priced basic service for all Californians. But new means for doing so effectively and efficiently must be explored. Any new mechanism for funding statewide universal service must maintain affordable prices where competition has yet to develop.

The Commission encourages proposals for innovative new ways to fund universal service that do not depend upon maintaining a local telephone monopoly. The Commission will issue a rulemaking to reform the present system of subsidies with the expressed intent of maintaining and advancing universal service amidst a fully competitive environment.

The Commission expects to consider and implement the use of competition to provide universal service as it opens local telephone markets at the end of 1996. By providing strong incentives for efficiency, we expect to significantly reduce the aggregate subsidy required to develop an advanced statewide network, and maintain affordable prices for basic service. A lowered subsidy burden would allow the California economy to operate more efficiently and competitively overall.²¹

To assure affordable basic service and Lifeline service for low-income consumers, the Commission will consider a redesigned subsidy system to become effective on January 1, 1997 in which competing firms would bid the lowest price for which they would be willing to offer service in various areas of the state. Where all bids are above the ceiling price that may be charged for basic service, the lowest bidder would be awarded a multi-year contract which provides a subsidy equal to the difference between the winning bid and the capped price to the public. In instances where one or more bids are at or below the public ceiling price, no subsidy would be necessary.

If technical limitations were to delay equal access for local service, we would not implement all of the bidding elements of the new funding mechanism until a later date. In this event, LECs would continue to be required to offer universal service in their existing territories. Firms that bid to receive any form of

subsidy would have to comply with closely-monitored minimum standards for interconnection, interoperability, ordering intervals and service quality.

As part of this proposal to use a competitive process to provide universal lifeline service, the Commission intends to propose an Infrastructure Fund, to be used to support universal service for areas which might not otherwise be served. Contributions to this fund would be independent of any individual firm's operations and would provide a unified source of subsidies. The fund could be generated by the proceeds from a small assessment on all telecommunications service providers in the state. Keeping the amount as small as possible in order to minimize the effect on competitiveness, and limiting the aggregate amount of subsidy to no more than that in the current system would be key objectives in structuring such a fund.

An Emphasis on Schools and Libraries

The educational community is well aware that advanced telecommunications can significantly improve the quality of education. The challenge has always been securing adequate funding to ensure that students can benefit fully from these technologies and that teachers receive the training necessary to bring the benefits to students. With advances in digital imaging and computer-based reference materials, libraries will become an increasingly vital part of our educational system. Unless our schools, libraries and homes are adequately linked with each other and to the outside world, the benefits these technological advances offer will go untapped. This Commission strongly embraces Governor Wilson's commitment to providing every student access to both the world's advanced library systems and the state's best teachers. To do so requires a special partnership between schools, libraries, and the private sector. It also requires funding.

To support the use of advanced telecommunications in California's K through 12 schools and public libraries, the Commission recommends creation of a Schools and Libraries Information Technologies Grant Program providing up to \$150 million annually. Its objective: to provide funding for planning, training and equipment. Funding could come from a variety of sources such as issuance of state bonds, a small end user surcharge on all telecommunications services, a direct appropriation of state funds, or some combination. Further consideration is

necessary to determine the appropriate funding source for the program. This modest amount of "seed" investment will foster demand for services and products in the home and in our communities, thus promising to bring the benefits of advanced telecommunications to Californians more rapidly.

With the passage of recent legislation (SB 600), authored by Senator Herschel Rosenthal and signed by the Governor, the Commission will take immediate steps to form the California Telecommunications Task Force. This task force will assist the commission in devising and implementing ways to bring to our schools, libraries and community centers necessary communications technologies and services. This task force will be made up of representatives of telecommunications service providers; representatives of public institutions such as schools, libraries, and community centers; and citizens familiar with the environment in which these technologies will be used.

CHAPTER IV

Understanding the Challenge Ahead-- Why a Technology-Specific Path is Unwise

We believe that state policy should not dictate specific technologies to deliver advanced telecommunications, nor select specific firms that will be responsible for infrastructure development. Few things about the future market for telecommunications are predictable, and a more-directive approach to infrastructure development will expose California to unnecessary risks. The overwhelming rate of technological change in telecommunications, the incredible diversity of consumer needs in California, and the fundamental transformation in the way telecommunications will be used in the next century all argue against any central technology or market planning.

The Unrelenting Pace of Technological Progress

Advanced telecommunications relies on the use of computing technology. As such, it is subject to major technological breakthroughs which can occur at rapid intervals measured in months rather than years. The state of the art in such areas as switching, transmission, compression and digital processing is advancing so rapidly that some "new" technologies never have the chance to mature commercially before they are eclipsed by more innovative, cost-effective technologies.

These conditions make a traditional planning approach a nightmare. With the specter of new technologies becoming overshadowed virtually overnight, and with the basic economics of the industry changing dramatically, multi-year planning is risky even for entrepreneurial firms.²²

Government planning of telecommunications infrastructure is at an even greater disadvantage, facing at least four potentially fatal burdens. First, public decision-making is inevitably slower than that in the private-sector because of due process requirements. Second, government agencies are not generally able to sustain a state-of-the-art level of technical expertise because of budgetary and personnel constraints. Third, many of the most important innovations will continue to emerge from firms outside the universe familiar to regulators as the lines between the telecommunications, computing, information and entertainment industries continue to blur. Fourth, the *de facto* standardization imposed by a centralized government decision can freeze network innovation, by precluding the incremental and continuous improvement in the state's overall infrastructure that independent decisions made by many different firms can produce.

As one industry representative succinctly expressed it:

If you could today wave a magic wand and decide that instantaneously a new or specific technology would be deployed in the State of California, you should definitely resist that temptation, because it's been proven time and time again that as technology deploys itself further and further, deeper and deeper into markets, it always improves along the way. To make any investment into a single technology now would be to deprive consumers of improved technologies tomorrow.²³

Simply put, telecommunications infrastructure is a hostile environment for conventional public planning. The astounding rate, vast scope and unpredictable nature of technological innovation strongly suggest that any public strategy which is preoccupied with direct technology planning faces a high probability of failure.

A Diverse State With Rapidly Changing Needs

Another factor which must figure in the choice of an infrastructure strategy is the diversity of the hundreds of thousands of California businesses and tens of millions of California residents.

Telecommunications users range from individuals who have marginal reading and learning skills to the most technologically-sophisticated engineering and

scientific research firms. This nation's largest state contains a massive and diverse population. It is also home to the largest high-technology centers in the United States, and contains some of the wealthiest communities in the nation. Its large urban areas are separated by vast rural areas.

Given this heterogeneous group of consumers, the prospect of satisfying the needs of all or even most Californians through a single, integrated network is overwhelming. A participant at the Commission's hearings expressed this sentiment:

Looking at the wide disparity in the number and types of users, the different potential applications they will utilize, the performance and price expectations they will have, leads to the conclusion that their communications requirements will be diverse and that no one technology will be the answer for all their needs.²⁴

Such a task is more challenging when one considers the rapidly changing requirements of this diverse population, particularly those who require highly complex transactions which can often exhaust the capabilities of new telecommunications technologies as soon as they become available.²⁵

The challenge presented by such diverse and mounting consumer requirements coupled with rapidly changing technologies, makes the prospect of anticipating the future risky at best. As one witness testified, "the new infrastructure will be used in ways that are unknown today. We cannot predict the future."²⁶

Since information links nearly every aspect of our lives, the dramatic transformation in the way it can be managed and used can alter the way we lead our lives -- further complicating the challenge of traditional planning. As one expert stated: "(w)e are dealing with a technology involving social and political change on a scale and at a speed never before experienced by human beings."²⁷ One researcher who testified expressed the difficulty of projecting the future from past experience in telecommunications: "Instead of being well-understood and gradual ... the transformation that we are undergoing today is a drastic and discontinuous one."²⁸

The Risks and Rewards of Action

This combination of technological change, market diversity and discontinuous transformation of the role of information is the environment which faces any government infrastructure strategy in telecommunications. California's telecommunications infrastructure must not only be a tool for change; it must adapt to change itself so it does not become a millstone around the neck of the California economy.

As in the private sector, public officials must understand the degree of uncertainty in this arena -- there are no guarantees for the success of any specific publicly funded infrastructure investments. With this in mind, the Commission decided in 1989 to abandon detailed investment reviews for California's two largest local telephone companies in favor of a regulatory process which encourages company management to invest on their own initiative, and to a certain degree, bear the risk of that investment. While California's infrastructure is being modernized at a pace comparable to that in most other states, we propose that the 1989 reforms be redefined and greatly enlarged to further allow the two largest telephone companies to invest on their own initiative, and to fully bear the risk and rewards of such investments.²⁹

CHAPTER V

Critical Network Planning Issues

As the market for advanced telecommunications applications and consumer knowledge grows, so too, will California's demand for telecommunications products and services. Network capabilities must expand to meet the increasingly technical requirements of new applications, as well as the demands imposed on the network by a growing number of consumers.

Demand for Advanced Networks

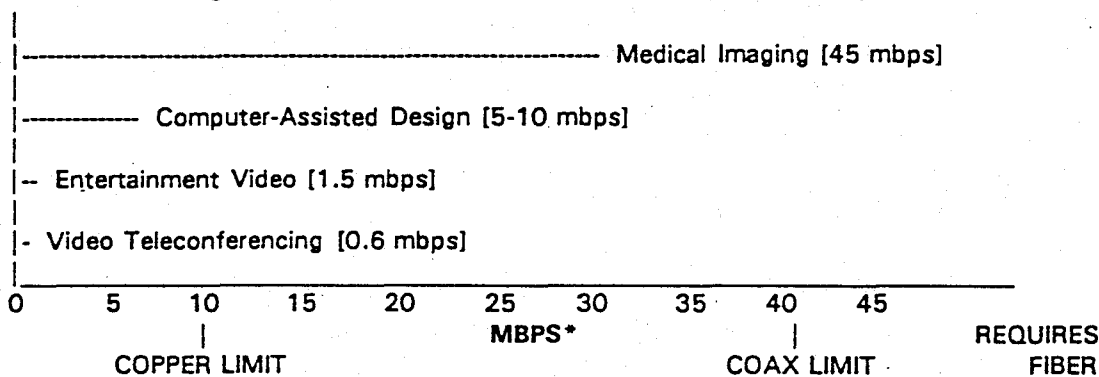
Experts premised early visions of telecommunications infrastructure on the assumption that new ways of using the network necessarily would require broadband capabilities. The term "broadband" refers to the ability of the network to transmit information at high speeds -- speeds generally made possible through the use of coaxial and fiber cable. While definitions vary, broadband transmission rates generally exceed forty-five million bits (megabits) per second or faster. It takes only sixty-four thousand bits (kilobits) per second of transmission speed to support simple phone conversation.

Currently, only highly sophisticated telecommunications applications such as medical imaging or supercomputing require broadband transmission rates. Most emerging applications still do not require broadband speeds. Many applications dependent on a great deal of bandwidth, such as computer-assisted design and medical imaging, involve the transmission of high-resolution, full-motion video. Indeed, these specialized applications can consume as much as forty-five megabits per second.

Using compression technology, most video applications, such as home entertainment video, can be provided over copper wires with approximately 1.5

megabits per second of transmission capacity. Simple video teleconferencing can be provided with only 600 kilobits per second or less of capacity. For example, remote video allowed witnesses from across the country to testify at the Commission's third public hearing. The remote video used required 336 kilobits per second of capacity. This transmission rate is less than one percent of the 45 megabits per second rate, which is identified as the *lower* end of the broadband range.

Figure 1
COMPARISON OF REQUIRED TRANSMISSION SPEEDS



Nevertheless, there are currently specialized uses for broadband technology, and the use of broadband capacity will increase. In fact, the demand for high-speed transmission is steadily increasing. Some companies currently offer 622 megabit per second service; others plan to offer gigabit -- billions of bits per second -- services. Finally, terabit -- trillions of bits per second -- services are on company drawing boards.

Technological Alternatives

California's current telecommunications infrastructure is currently a "network of networks" in which different consumers use different services requiring different

network designs.³⁰ Some analysts consider such a network to be both reasonable and desirable.³¹ The diversity offered in a telecommunications infrastructure composed of multiple networks can minimize the consuming public's risk with uncertain changes in technology and markets. As stated earlier, the Berkeley Roundtable's Francois Bar and Michael Borrus have advanced the notion that "infrastructure should be thought of as a 'portfolio' of networks." They urge us to "...diversify the portfolio with different technologies and foster experimentation."³² This view is consistent with ours.

A wide variety of experts, including witnesses at the Commission's hearings, suggest that adding to and improving the copper wire network in use today may offer the most cost effective way to improve telecommunications infrastructure. Computing pioneer Mitch Kapor stated, "[T]here is still a lot of life left in the copper plant that provides virtually all of the telephone service in the state."³³ Voice, data and video can all be carried over copper lines already in place, but to accommodate all three requires digitalization to increase the transmission capacity of "old copper."³⁴

We can enhance our use of the existing copper network by taking advantage of well-established, narrowband ISDN configurations which extend up to 1.5 mbps of bandwidth. Network operators can also employ alternative technologies, such as Asymmetrical Digital Subscriber Line (ADSL), which is specifically designed to enable copper lines to carry video distribution or two-way video signals.³⁵ Recently-proposed national standards for ADSL, already deployed in some parts of the country, create four VCR-quality video channels (1.5 megabits each); the standards also create wideband data and voice channels, operating simultaneously over standard copper, each at vastly lower cost than would be the case by installing fiber optic cable.³⁶ ADSL can also support very high resolution video teleconferencing.³⁷

Fiber and copper can also complement one another. Fiber optic cable is already used in the portion of lines closest to local telephone company switches, where network traffic is most concentrated. Fiber investments in the telecommunications network are economically feasible when the signals from hundreds, or even thousands, of individual subscribers have been concentrated. Replacing copper with fiber in this portion of the network will shorten the average length of copper remaining in telephone lines to the subscriber, dramatically increasing the transmission quality and capacity of the remaining copper wire.³⁸

Most telecommunications industry analysts' views are summed up in this statement by AT&T:

The broad implementation of "fiber to the home" supporting broadband applications for each customer, while it may be a desirable long term objective, is expensive and more than a decade away. However, "fiber to the neighborhood", as a mechanism to aggregate several customers' copper-based access lines, can be more economical for a broad base of customers during the 1990's. In conjunction with this, most consumers and small businesses can get the full value of the information infrastructure with currently-available (and cost-effective) technology based on the embedded copper plant. Such available technology includes Integrated Services Digital Network (ISDN), High-bit-rate Digital Subscriber Line (HDSL) and Asymmetrical Digital Subscriber Line (ADSL).³⁹

To this list we can add high bandwidth capabilities of the cable networks. Cable networks, originally designed for one-way video broadcasting, pass ninety-five percent of the households in the nation.⁴⁰ It is possible to modify the networks to provide two-way video transmission and switching.

Many experts at the Commission hearings opposed policies designed to force specific technologies.⁴¹ Their arguments focus on the difficulty of planning for an uncertain future. Differences in opinion among some witnesses with respect to specific technologies underscores the risk of endorsing any particular technology and reinforces our conclusion that adopting a technology-specific path is unwise.

For these reasons, and others cited in this report, we do not believe that state policy designed to specifically mandate widespread or ubiquitous deployment of broadband capabilities is required at this time, but may be desirable in the future.

The Debate Over Standardization

Debates over standardization arise whenever the components of a particular system are designed by different providers. When components are linked together to form a communications network, the debate becomes particularly urgent. In telecommunications and computing, both of which are characterized by freewheeling innovation, any standardization can dramatically shape the market and influence the ability of firms to compete successfully.

A government policy decision to impose a product or service standard must be a balancing act, where the freedom of individual firms to pursue different designs is limited to further some public benefit. Generally speaking, we favor a minimum of government intervention into competitive markets in order to spur the most rapid innovation, the greatest efficiency, and the most diversity to respond to differing consumer needs. Standards-setting involves a choice to sacrifice some measure of competitive innovation and diversity, and for that reason we recommend that it be used sparingly and be designed in the least intrusive way possible.

Advocates for standards argue that they yield obvious benefits. For instance, they can rationalize the maze of incompatible communications protocols that can result from extensive niche marketing by different service and equipment vendors. Absent an internetworking standard, consumers in one system may not be able to communicate with others using another. Worse, commands in one system might have wholly unintended meaning in another, leading to potentially catastrophic results. Equipment can convert traffic from one network into the format of another, but this too has a cost. On its face, compatibility problems argue in favor of mandatory standards.

Others favoring standards argue that if today's technological innovation will soon be useless, why not require new networks to operate with existing equipment? This argument favors what is referred to as a "backward compatibility" approach to standards.

But there is a tradeoff. Early official or *de facto* standardization freezes innovation at the point at which standards are adopted, foreclosing potentially superior technologies. In an environment characterized by rapid innovation, it is critical to determine *when* to adopt a standard in order to capture important

competitive benefits. The selection of a standard designates a "winning" design and can, if adhered to, relegate non-standard designs to museum status.

Selecting a state infrastructure technology standard early in the game forces California to pick a single design as the state's "official" entry in the national and international technology competition. As superior technologies later emerge, California may find itself with incompatible equipment or with investments that must be written off.

Premature or excessive standardization can also cripple the incentive for firms to develop new superior networks. Telecommunications providers often *avoid* compatibility with other networks in order to establish clear competitive differences from other firms, or to prevent other firms from "free riding" off their market advantage. To the extent that government does not mandate interconnection standards, firms will be encouraged to develop new networks based on the profits earned by competitive advantage. Firms can maintain competitive advantage to the extent they can prevent less capable firms from drawing on the capabilities of the superior networks.⁴²

Backward compatibility requirements will either raise the cost of new approaches to telecommunications by an amount equal to the cost of establishing compatibility "backwards" toward old methods, or discouraging multiple approaches to networking in order to avoid such costs.

We believe these problems can be minimized by observing three principles:

- Consider standards only in cases where there is clear public benefit.
- Focus on standards for those aspects of the network which are indisputably fundamental to the state's economic health and, where the tradeoff between compatibility and innovation weighs clearly in favor of compatibility.
- Use performance standards whenever possible. Standards should be expressed in terms of results desired, *not* the specific way they are achieved.⁴³

Standards should be crafted in a way that preserves the ability of firms to retain profits from the value they create. Regulators will need to oversee the interconnection terms of firms who continue to enjoy market dominance.

CHAPTER VI

Making the Telecommunications Infrastructure Work for California

California Requires More Than an "Information Superhighway"

Our ambitious vision for advanced telecommunications sets in motion a sea change in the way California's citizens interact and its businesses operate. To secure the benefits our vision promises requires more than constructing large "information pipelines" throughout the state. We must further ensure that consumers both understand and have access to the tools, or "applications," necessary to exchange and use information carried through these pipes. The importance of this point is heightened by the popular comparison between efforts underway in the 1990s to build a high-speed telecommunications infrastructure, and those undertaken starting in the 1950s to construct interstate highways.

Many have come to label the notion of an advanced telecommunications infrastructure with the title "information superhighway." This despite the fact that the analogy to automotive superhighways belies major differences between the two situations. The major components of modern automotive transportation were developed and in place by the 1950s; Americans were quite familiar with, and many used, cars and trucks; also well developed were networks of local roads' and gas stations were just short of ubiquitous. With these components in place, aggressive government programs to develop superhighways appeared poised to guarantee improved transportation for the public.

The advanced telecommunications industry of the 1990s faces dramatically different circumstances, however.⁴⁴ If information represents the modern equivalent of the people and cargo carried over our automotive superhighways, the "cars and trucks" which allow us to package and load information for its electronic journey may represent one of telecommunications weakest links. These "cars and

trucks" of advanced networks include video and data terminals, mobile handsets, the converter boxes and specialized computer boards which ready information for its journey along the highway, **and allow it to be used at its point of destination.** And unlike Americans' familiarity with cars and trucks during the 1950s and 1960s, significantly fewer are currently familiar with the tools of the Information Age.

To make our vision a reality, **each** of the components of our new infrastructure must fall into place: consumers must be equipped with the high technology "cars and trucks" required to use the Information Superhighway's high capacity; consumers must also know how to operate them to journey to the many known, or as yet unexplored destinations, to which the telecommunications highway leads.

We divide the different components of advanced telecommunications infrastructure into three distinct categories:

- Public Network Capabilities;
- Applications, including Customer Equipment; and,
- Consumer Education and Training.

Keeping with the transportation analogy, we use "public network capabilities" to refer to the telecommunications equivalent of the functions performed by public roads. These include the collective capabilities of interconnected networks that are available to the public to move information at low or high speed among different locations in the state. In short, the wires, cables or radio waves that carry information.

By "applications" we refer to the **services** delivered over the network. An example of one such service is an on-demand educational video library. A vendor wishing to market video libraries to schools will need to develop informative and interesting programs, as well as software, enabling consumers to tap the libraries' potential. The customer will require the video terminals and "converter boxes" necessary to receive and view the videos as well as the equipment necessary to gain access to the public network. All of this is in addition to the necessary network capabilities.

Finally, "consumer education and training" refers to the programs and information required to ensure consumers are aware of and know how to use applications. This represents a key component of any advanced infrastructure since without it consumers are unable to tailor services to best meet their specific circumstances and requirements.

Successfully integrating these three components means telecommunications networks must possess the technical capabilities that each application needs to operate; software and customer equipment available to users must combine with raw network capabilities to yield affordable services of value to consumers; consumers must know which applications exist and how to use them. If any of the three components is not ready when it is needed, the value of the infrastructure is diminished.

A significant number of California's consumers do not yet possess the analogous skills and knowledge which ensured the success of the transportation strategy of the 1950s, 60s and 70s. Thus, for our telecommunications infrastructure strategy to succeed for all Californians, we must develop an information superhighway that joins knowledgeable consumers with valuable applications.

How the Components of Infrastructure Work Together

We find that policy discussions over infrastructure are often preoccupied with the subject of advanced network facilities, such as widespread fiber optic cabling. Such preoccupations imply that the public network represents the primary barrier we must overcome in order to achieve the goals we seek. In our view, this emphasis is misplaced.

Information culled at hearings convened by this Commission and other research indicates that a lack of affordable or valuable applications, as opposed to inadequate network capabilities, often limits the potential benefits consumers might otherwise reap. What is more, many cite consumers' lack of familiarity with applications as a primary barrier to the effective use of advanced telecommunications. Indeed, in many cases consumers do not exploit the full potential of the *existing* capabilities of California's public telecommunications networks. Consequently, it appears quite unlikely that a single-minded focus on

the aggressive development of the capabilities of California's public networks will offset inadequacies in applications, or lack of education or training.

The following examples, drawn from education, business, and transportation, help illustrate how the different components work together to create valuable services for California's consumers.

Distance Learning in Education

Distance learning provides one example of how progress needs to be made on all three fronts to fully realize the benefits of this valuable application for California.

Distance learning links multiple sites electronically so an instructor or group of instructors in one location can teach students in other locations. Distance learning can allow California to create "classrooms" which brings together students with similar needs or interests from across the state or across the nation. For example, a university professor can teach a high-school course in advanced mathematics simultaneously to small numbers of students in inner-city Los Angeles, suburban Cupertino, and rural Alpine County.

Distance learning allows school districts to match the diverse needs of individual students with appropriate educators. In this way, even the smallest school districts can enjoy access to specialized instruction, while large urban districts can better maintain a strong curriculum in the face of stringent budget constraints.

The Alliance for Distance Education in California proposes a balance of networks, applications and user training which is similar to and supports our definition of a successful infrastructure:

There are three essential elements which must be combined to bring educational technology to all of the students of California: first software must be developed and tested which responds to the various learning needs of children and aligns with the state frameworks for instruction; secondly, the infrastructure and hardware must be in place in classrooms so that students may access and utilize the

appropriate software whenever needed; finally, teachers at all levels must be trained to use media to both teach and manage instruction in an environment which is both effective and efficient.⁴⁵

Optimal distance learning significantly diminishes the limitations of geographic distance by making two-way voice, data and video capabilities available in a network that connects the sites where teachers and students find themselves. The demands of distance learning networks can be met with a variety of transmission media such as copper, coaxial, or fiber optic cable or radio. Network capabilities required for distance learning could be provided over the public telephone network, a cable television network, or a private network consisting of satellite transmitters and receiving dishes operated jointly, for example, by universities and local schools.

Distance learning also requires a considerable amount of application-specific equipment at each site such as video cameras, screens, data terminals, associated processing hardware and cabling, and software. Developing this portion of the infrastructure required for distance learning can represent a particularly significant challenge for K-12 schools, since many school buildings are not yet equipped with even basic telephone wiring.

Finally, for our teachers to become effective distance educators requires training. Arguably, providing teachers with the training necessary to use distance learning software and hardware represents the more straightforward challenge. Yet a more subtle challenge focuses on the need to adapt curricula and teaching skills to the decentralized distance learning environment in which interaction and an enormous amount of stored information occurs via an electronic medium.

Successful distance learning simultaneously brings together each of the three components of telecommunications infrastructure--network capabilities, applications and training. Pioneers of such Information Age techniques include private-public partnerships such as the California Educational Technology Program (EdTech Program). The EdTech Program sponsors research and development into technology-based education, instructional support for schools and teachers, and model schools designed to test new teaching approaches.

Computer-Aided Design and Manufacturing

The use of advanced telecommunications for computer-aided design and computer-aided manufacturing in business illustrates how developing improved applications equipment and software represents the key to expanding use of the application.

Business currently uses computing technology to design, engineer and manufacture many products, including industrial machinery, automobiles and consumer electronics. When combined with high-speed communications networks, this power allows researchers and technicians at different locations to collaborate on computer modelling, simulating the performance of new products, and resolving complex production challenges.

Advanced network capabilities providing high-quality and high-speed transmission are vital to allow users in different locations to share the enormous amounts of data employed in computer-aided design and computer-aided manufacturing (CAD/CAM) applications. The demands on the network increase significantly when several users wish to interact to manipulate complex "three-dimensional" video images simultaneously. On the other hand, since in most instances only a limited number of discrete locations require CAD/CAM these requirements can be met with specialized telecommunications services.⁴⁶ Businesses interested in such distributed CAD/CAM applications generally have the ability to obtain such high-speed telecommunications links through a variety of existing public networks or through links currently being deployed in California.

Compared with distance learning directed toward K through 12 instruction, the expansion of distributed CAD/CAM applications in business depends less on improvements in consumer education and training. Consumers of distributed CAD/CAM generally exhibit high levels of technical sophistication and expertise. Thus, while some need for training and adjustment to new capabilities exists, it is less likely to represent the principal barrier to the use of this application.

Efforts to expand distributed CAD/CAM in business focus on both developing CAD/CAM applications and integrating them with design and manufacturing processes.⁴⁷ While network capabilities may be available, and users may be willing and interested in exploiting them, considerable complexity

persists in the design of technologies and systems required for businesses to use these tools.

Telecommuting

With respect to telecommuting, maintaining adequate consumer education and training in the face of rapidly developing applications equipment and software appears to be the biggest challenge.

Telecommuting substitutes travel to and from centralized work sites with telecommunications. Telecommuting allows individuals to work at home or work from remote offices and interact with headquarters via telecommunications.

Telecommuting offers undeniable economic and social benefits for Californians and for California businesses. Telecommuting spares employees the time and frustration of commuting long distances to and from work, thereby increasing job satisfaction and increasing time for other interests and responsibilities. Employers can use telecommuting to reduce costs, improve productivity and to attract and retain skilled workers. Freeways are less congested as a result, reducing the time that even non-telecommuters spend commuting. Of equal importance, telecommuting promises to help improve the state's unenviable air quality and further the state's energy efficiency goals.

Many experts indicated that the primary barrier to telecommuting is not a lack of network or computing capabilities, but rather the adjustment that organizations must make when workers perform their responsibilities away from the offices of supervisors and colleagues.⁴⁸ The capabilities of existing public telecommunications networks are "clearly sufficient to support substantial telecommuting activities."⁴⁹ Witnesses at the Commission's public hearings testified that "the infrastructure [for telecommuting] is there."⁵⁰ One telecommuter has stated that "at the current time, most of the limitation is a lack of imagination with technology."⁵¹ Nevertheless, enhanced network capabilities would surely increase the type and scope of work that could be performed, as well as expand the long-term opportunities for telecommuting.

This being said, employers continue to harbor concerns about supervision, instruction and quality control, which tends to make them reluctant to develop telecommuting programs.⁵² One participant in our public hearings asserted that

"the biggest barrier in realizing the benefits of telecommuting was the education of managers."⁵³ In a review of telecommuting issues, the *Washington Post* noted that "the biggest issue in telecommuting is overcoming the resistance of managers who believe that 'if you can't see someone, they must not be working'".⁵⁴

Still others point to the fact that all tasks are not universally suited to remote locations without substantial redesign of business practices. Finally, telecommuting may diminish certain characteristics of the traditional office environment valued by employers and employees alike, such as interaction among co-workers and socialization of new workers into the organizational culture.

A variety of techniques exist which may help overcome these barriers. For example, telecommuters might work from "telework" centers located near their homes. A telework center provides office space and office and communications equipment nearer to an employee's home than to his or her traditional place of work. An organization might rent space at these centers and allow employees to commute there rather than travel further to a centralized place of business. Telework centers provide additional support, including clerical assistance and information service support, that would not be available at home.

The fact that telework centers can establish high capacity telecommunications links shared by many offers considerable benefits. The introduction of advanced telecommunications, such as high-quality two-way video channels that remain open continuously, may create the sense of physical proximity necessary to overcome managers' and employees' uncertainties and anxieties. Telework centers give telecommuters access to sophisticated telecommunications technologies and services, provide the employees with needed support, and give employees a chance to interact with co-workers.

Thus, the key to expanding telecommuting applications lies in educating executives, managers and employees about the benefits and successful implementation of telecommuting techniques.⁵⁵ In addition, current public policies may unintentionally discourage telecommuting. For example, existing tax treatment of in-home offices may discourage investment in telecommuting.

Barriers to Infrastructure Development

Fostering an environment in which consumers enjoy ready access to the information springing from continued advances in planning, research and trials of advanced telecommunications applications represents a major challenge for California. The effective sharing and dissemination of such information promises to help consumers better understand their options and tailor services to meet their specific requirements. Below we identify barriers to the use of advanced telecommunications which we believe merit attention.

Network Capabilities

Though our analysis does not identify the technical capability of California's public telecommunications networks as the dominant barrier, there nevertheless remain certain key issues tied to network capability that merit examination. Since a large number of the emerging applications we envision involve transmitting substantial amounts of digitized information, the success of California's infrastructure will depend in part on making digital telecommunications capabilities widely available at a reasonable cost to consumers.⁵⁸

Applications, including Customer Equipment

In our view, specific applications represent the key component to the success of California's infrastructure. Designing applications which consumers find accessible and affordable is particularly critical. Of comparable importance is the development of affordable, "user-friendly" equipment required to operate applications in homes and businesses. Digital phones, information terminals and other customer equipment often require substantial up-front investment and can act as a barrier to the use of advanced telecommunications. Technological advances, competitive innovation, creative marketing, and public policies as well can help lower this barrier.

Consumer Education and Training

The issues tied to consumer education and training are often subtle but, as illustrated by the examples offered above, attention must be paid to education and training for California's infrastructure to succeed. Consumers' lack of education, in conjunction with issues tied to accessible applications design, often limit the

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use of advanced telecommunications. Simply throwing resources at increasing network capabilities does not directly address barriers arising from inadequate education and training, though we recognize that increased market opportunities tied to new network capabilities will increase businesses' incentive to educate consumers.

Enhancing network capability will encourage the development and use of new applications. This in turn will ultimately make more obvious the need to educate the broad range of California business and individual consumers about the extent to which they can benefit from the use of telecommunications-based services and products. Just as with the automotive superhighway, each of the three components of infrastructure we have identified must be developed simultaneously, and it is only by examining each component that we can understand the work that lies ahead.

APPENDIX 1

Specific Recommendations

Various elements of this plan require consideration by the Legislature as well as formal review by this and other agencies before they can be initiated or given the force of law. With respect to its tasks, the Commission will establish proceedings as soon as possible so full consideration can begin.

Open All Markets to Competition

- Open all telecommunications markets, including local telephone service, to competitive entry by January 1, 1997.
- Support the removal of federal barriers to open competitive entry into telecommunications and information markets in states that have opened all telecommunications markets. In particular, support efforts to lift the federal restrictions on long-distance, manufacturing, and cable programming offerings by California telephone companies at the time the Commission opens the local telephone market to full competitive entry at the end of 1996.
- Support any further reallocations of radio spectrum and the licensing of additional service providers by the Federal Communications Commission for commercial mobile telephone and personal communications services.
- Continue with the implementation of open access rules already underway, until the local telephone market is fully competitive. The rules require the unbundling of monopoly services into component parts to provide an open platform for the development of innovative telecommunications applications.

- Encourage the most cost-effective use of existing infrastructure, moving toward cost-based rates for regulated services, using an incremental cost standard wherever possible.
- Coordinate the Commission's consideration of open competition zones with the statewide policies the Commission is proposing.

Promote a Common Statewide Foundation for Advanced Capabilities

- Propose the adoption of a two-tiered approach to basic service effective January 1, 1997 to permit the transition to an expanded definition over time:
 - The first tier of basic service would include conventional *voice* telephone service and would be offered by competing firms. Prices for first-tier service would be subject to rate ceilings until the market becomes fully competitive.
 - Add an optional second tier of basic service to include basic digital access. Competing firms would be permitted to provide second-tier service and charge a separate price for its delivery.
- Initially, develop a common, but technology-neutral, standard governing the minimum technical capabilities of basic digital access to be made available throughout California by 1997.
- Monitor deployment and usage patterns as competing firms deploy basic digital capability around the state. If geographic or other significant gaps occur and persist, consider the possibility of offering targeted subsidies to any competing firms willing to fill such gaps.
- When a major portion of California's individual and business consumers find value in and use second-tier service, and digital access has become a common method for doing personal and commercial business, consider expanding Lifeline support to cover second-tier digital service.

- Encourage competing firms to extend the digital transmission capacity they offer under basic digital access to support multiple and two-way video distribution channels, among other capabilities.
- Require all providers of first-tier service to be interconnected with all other networks providing first-tier service; require all second-tier service providers to interconnect with all other second-tier service providers, thus enabling a consumer of service on one provider's network to reach any other consumer of the same service in the state.
- Require that basic service providers act as common carriers who may not discriminate as to the content carried over their networks.
- Create a Commission-sponsored industry forum to establish minimum service quality and compatibility ("interoperability") standards for firms offering expanded basic service. The forum should coordinate its efforts with national and international standards-setting bodies to the extent possible. The forum should emphasize a "performance standard" approach and maintain a technology-neutral policy to allow firms to select the most innovative or cost-effective technological design available.
- Consider access-related issues for individuals with disabilities in establishing standards.
- As a longer-term objective, strive to achieve statewide access by the end of the decade to full-motion switched video and mobile communications capabilities. Consider adding these capabilities to the transitional second-tier of basic service at a future time.

Table 1
SUMMARY OF ACCESSIBILITY AND AFFORDABILITY POLICIES

TARGET DATE	SERVICE LEVEL	AVAILABLE EVERYWHERE?	LIFELINE SERVICE?	MAXIMUM RATE CEILING?
Current	Voice Telephone Service	YES	YES	YES
1997	Expanded Basic Service FIRST TIER - voice telephone SECOND TIER - basic digital incl. low-speed video	YES YES, as option	YES Not initially, but to be considered after a major portion of consumers subscribe	YES NO, If Competitive YES, If Monopoly.
2000	Longer-Term Statewide Service - full-motion switched video - basic mobile	YES, as option	To be considered later	NO, If Competitive YES, If Monopoly

Maintain Effective Consumer Protection

- Retain simplified, but firm, regulatory control of firms which dominate specific telecommunications markets in the state. Regulatory emphasis should be on protecting captive customers from monopoly practices of dominant firms.
- Cap rates for basic telecommunications services, indexing them to bring down the cost of telephone service for the average Californian. Protect ratepayers from monopoly pricing, while ensuring that they benefit from lower rates achieved through competition where it exists.
- Maintain the Commission's commitment to lifeline service, including low rates for voice telephone service. Continue to refine the lifeline program to further the Commission goal of universal telephone service. Consider reforms to make universal service compatible with a competitive market and multiple basic service providers.
- Work with the Legislature, the Department of Consumer Affairs, the Attorney General's Office and other appropriate agencies to ensure that fundamental consumer protections are in place.

Streamline Regulation

- The Commission should work with the Legislature to develop a level of flexibility in the Public Utilities Code which will permit the Commission to achieve three objectives in conjunction with other public agencies:
 - Encourage free competitive entry and rapid innovation within minimum standards of interconnection and interoperability
 - Oversee the conduct of the relatively few firms which retain market power

- Ensure that consumers have appropriate information on which to make choices and have effective remedies against fraudulent practices.
- Within the new authority granted by the Legislature, the Commission should eliminate elaborate certification requirements and price regulation for firms that wish to enter California's telecommunications markets as new competitors.
- Within the new authority granted by the Legislature, the Commission also should end price regulation of currently-regulated services that face vigorous competition. We estimate that these steps would free the vast majority of firms now regulated by the Commission -- which only offer fully-competitive services --from comprehensive requirements of the Code.
- In lieu of entry and pricing regulation of new competitors and currently-regulated firms with fully-competitive services, the Commission should institute a simple registration program for all providers of telecommunications services which will facilitate the enforcement of minimum interconnection, interoperability, and consumer protection rules.
- Encourage private network operators to offer service to the public under the new registration status. Allowing private networks to make their telecommunications resources available to the public will diversify the options available to users, accelerate competitive innovation, allow for better use of existing telecommunications facilities, and generally improve the flow of information within the state by encouraging more fully interconnected networks.
- Promote a technology-neutral telecommunications infrastructure policy. Allow telecommunications providers in California to make their own investment decisions, including the type of technology employed. The Commission should reconsider its ban on fiber optic deployment beyond the feeder for local telephone companies.
- Reform the Commission's New Regulatory Framework to eliminate the rather small number of remaining incentives which distort investment decisions by making all dominant firms responsible, without limit, for the

profitability of their services and for observing any applicable rate ceilings. Alternatives to accomplish this might include 1) eliminating sharing mechanisms, and 2) removing the cap on earnings.

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Action for the Legislature and State Agencies

- Create a statewide program to support coordinated approaches to address the three factors which limit the use of advanced telecommunications:
 - 1) The availability of valuable applications and low-cost customer equipment for different types of users;
 - 2) Education and training of users about the existence and value of valuable applications; and,
 - 3) Availability of network services with necessary technical capabilities. Emphasize flexible approaches, quick implementation of trials, widespread distribution of information about results, and iterative development of solutions.
- Establish working groups, or support existing ones where appropriate, involving users, service providers, equipment and applications vendors, and public agencies to focus on overcoming hurdles to realizing expanded value from advanced telecommunications. Consider different working groups for each major type of application (e.g., telecommuting) or user (e.g., health care) to the extent limiting factors and potential solutions are substantially different. Working groups would pursue further work to pin down specific limiting factors to the use of advanced telecommunications, develop cost-effective approaches to overcoming such limitations, and coordinate applications and equipment development with user education programs and network services development.
- Promote aggressive information sharing and education and training programs designed to reach beyond the technologically rich sectors of our society to the state's disadvantaged populations.

We make the following specific recommendations:

- The Commission should establish a User Forum at the Commission to assess the advanced telecommunications needs of business and community

users, and how they may be better met through the state's public infrastructure.

- The Trade and Commerce Agency should work with the private sector to develop centers to showcase business applications of advanced telecommunications. These centers would demonstrate telecommunications service, equipment, and applications available from the wide range of vendors in the state, providing potential users with the ability try out different applications in "hands on" demonstrations and receive low cost consumer education.
- The state should encourage private/public partnerships between businesses and institution of higher learning to research ways in which advanced telecommunications can be used by California businesses to improve their competitiveness in the global economy.
- The Commission should remove regulations and streamline procedures which frustrate the attempts of California businesses to receive services from telecommunications providers in a timely manner and in a manner that fits their specific needs. The Commission will strive to act quickly where regulatory approval is required.
- The Commission should designate specific personnel at the Commission, familiar with the particular needs of California business, to assist businesses in getting the services they need and having their complaints handled by guiding them through the often complicated regulatory process.
- Consistent in the approach of building strength through diversity, the state should continue its policy of assigning fundamental responsibility for the management of information technology to each individual agency.
- The state should continue efforts to coordinate multi-agency use of telecommunications and information technology through the bodies such as the Multi-Agency Information Management Authority.
- Continue state and local government partnerships with business to explore uses of advanced telecommunications, with an emphasis on government "test sites" for new technology. State government will benefit from the

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successful development of such applications and California business will benefit from real world testing opportunities.

- State agencies should work to complete transactions in electronic format via telecommunications services. Public information should be made available in electronic format and be accessible via telecommunications.
- The state should coordinate its effort to acquire funding for networking pilot projects from agencies such as the National Telecommunications and Information Administration. Matching funds may be made available to states, schools, libraries and other non-profit entities so that they can purchase computers and networking connections.
- The state should consider programs to allow government-operated networks to offer commercial service in rural and other areas where service is sub-standard.
- Planners at all levels of government should encourage developers and others to provide advanced telecommunications infrastructure just as it would encourage the proper sewer and transportation infrastructure.
- California, through the coordinated efforts of agencies such as the California Transportation Commission, CalTrans and the Air Resources board should continue and expand efforts to promote telecommuting, including the development of telework centers and the development and demonstration of telecommuting applications. Special emphasis should be on the development of private for-profit tele-work centers.
- California, through the coordinated efforts of the Multi-Agency Information Management Authority, the Department of General Services and CalTrans, should consider, and if cost effective, develop State Government Tele-Work Centers and allow various state agencies to share the facilities and equipment.
- California state government, along with regional and local transportation and air quality agencies, should continue and expand the demonstration of telecommunications technologies that improve air quality, reduce

congestions or otherwise allow for a more efficient and effective transportation system.

- The state, should investigate the effects tax policies have on telecommuting, identifying and seeking to eliminate any bias against investments and expenditures associated with telecommuting.
- The state should coordinate efforts to seek federal monies, such as funds from the Intermodal Surface Transportation Efficiency Act, the National Energy Policy Act and the Federal Technology Reinvestment Program, for development of tele-work centers and other telecommuting solutions.
- The state through the Office of Competitive Technology, should assist with the commercialization of telemedicine applications developed at public hospitals to encourage the development and use of telemedicine applications.
- The Secretary of Health & Welfare should establish a special task force to develop policies to ensure that the health care system in California takes full advantage of advanced telecommunications technologies and the innovative, competitive California telecommunications marketplace of the future. This special task force should work closely with the health care community, and may among other practices, work on development of standards for computer based patient records and electronic benefits payment.
- The UC and CSU systems and the Department of Education should establish curricula for training existing and new teachers with the skills necessary to tap the full potential of advanced telecommunications, especially distance learning.
- Institutions of higher learning should develop partnerships with businesses and local educators to assist K-12 schools to fully use advanced telecommunications technologies. Such a "technology mentor" program would provide training in the use of new learning technologies.
- The state should continue funding for the Education Council for Technology in Learning and actively seek federal funds to supplement the use of

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technology in learning. Federal funding may be available from non-education agencies such as the National Telecommunications and Information Agency, which may provide matching grants to schools, and libraries so that they can purchase the computers and networking connections needed for distance learning and for interconnecting with computer networks such as NREN and Internet. The Education and Industry Councils for Technology in Learning can provide valuable resources to schools seeking such funding.

Information Technologies Grant Program for Schools and Libraries

- To promote the use of telecommunications infrastructure in California's K-12 schools and public libraries, the Commission recommends the creation of an Schools and Libraries Information Technologies Grant Program providing up to \$150 million annually.

Major features of the Program:

- Its objective would be to provide expanded funding for planning, staff development and equipment purchases which will spur statewide development of valuable telecommunications applications in K-12 schools and public libraries.
- Education uses of the funding would be coordinated with the requirements of the Morgan-Farr-Quackenbush Educational Technology Act of 1992 (SB1510, Chapter 1309) and activities under the California Master Plan for Educational Technology.
- The fund would go primarily to support assessments of needs, planning, staff development and coordination of existing resources by local school districts and libraries.
- Funding for network facilities, hardware and software would be made available where such planning and coordination has been completed.

- Schools and libraries requesting funding for facilities would be asked to submit proposals that explain the role of information technologies in their programs, and identify the specific problems that are to be overcome with the additional funding.
- Schools and libraries would be required to provide matching funds to obtain grants for major investments and operating expenses, with the exception of those costs associated with pilot projects.
- Schools and libraries which requested funding for network facilities and other hardware would be asked to consider how their proposed designs would evolve to extend the usefulness of the investments as new technologies emerge.
- Consistent with the "technology neutral" and "provider neutral" policies in this Report, schools and libraries applying for grants would be encouraged to consider any combination of technologies and vendors to best enhance each recipient's education or library program objectives.
- Recognizing that funding could come from a variety of sources, consider funding the program through one or more of the following:
 - Issuance of state bonds;
 - Assessment of a small surcharge on all telecommunications services;
 - State General Fund appropriation; or,
 - Other options may also be considered as they are developed.
- Establish as soon as feasible the California Telecommunications Task Force consistent with Senate Bill 600 (Rosenthal), signed into law by the Governor in 1993. The task force will assist the Commission devise and implement the means necessary to bring appropriate telecommunication technologies and services to public institutions such as schools, libraries and community centers. The task force will be comprised of individuals

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representing communication technology and service providers, schools, libraries and community centers, as well as other stakeholders.

APPENDIX 2

List of Participants

The following list includes the many individuals and organizations that participated in the Commission's study of telecommunications infrastructure issues or provided information for the Commission's research. We apologize for any inadvertent errors in attribution or omissions.

The ATM Forum

- AT&T, Richard A. Bromley, Jack Harrington, Ellwood Kerkeslager, David J. Lenehan
- Alameda County Office of Education, August Scornaienchi
- Alliance for Community Media, David R. Fertig
- Alliance for Public Technology
- Berkeley Roundtable on the International Economy, University of California, Berkeley, Francois Bar
- British Telecom, North America, Ron Bamburg
- California Bankers Clearinghouse Association, George Cheng
- California Cable Television Association, Dale Bennett, Ron Cooper, Alan Gardner, Robert McRann
- California Cellular Resellers Association, Incorporated, Peter Casciato
- California Council on Science and Technology -- Project California, Roy Anderson
- California Department of Consumer Affairs, Richard Elbrecht
- California Department of Education, William L. Padia
- California Department of Transportation
- California Hispanic Chambers of Commerce, Manuel Rosales
- California ISDN Users Group
- California Payphone Association, Randy Kuhlmann
- California Public Utilities Commission, Division of Ratepayer Advocates, Ed Texeira
- California State Library, Cameron Robertson
- California State University, Office of the Chancellor, Laura Guillory
- California State University, Barbara O'Connor

California Telephone Association, Barry Ross
Cellular Carriers Association of California, Stephen Carlson
Center for Telecommunications Management, University of Southern California,
Bill Davidson
Citizens Utilities, Arthur Smithson
City of the Future Committee, San Diego, John Eger
City of Los Angeles, Susan Herman
Clear View Elementary School, Ginger Hovenic
The CompuMentor Project, John Coate
Connecticut Department of Public Utility Control
Consumer Action, Anna Alvarez Boyd
Consumer Federation of America
Consumer Research Foundation, Helen E. Nelson
Cooper, White & Cooper, Alvin Pelavin
Cox Cable, Robert McRann
Dole Foods, Ben Zemel
Economics and Technology, Incorporated, Lee Selwyn
Educational Telecommunications Network, Patricia H. Cabrera
Electronic Frontier Foundation, Mitchell Kapur
Far West Laboratory, John Cradler
Fight Back! Foundation, Kathie Klass
First Pacific Networks, Earl Thelen
GTE California, Incorporated, Barbara Burger, Thomas Sweet
Genius Incorporated, Byron D. Wagner
Graham & James, Richard L. Goldberg
Hesse, Stobbe & Association, Andrew O. Hesse, William R. Stobbe
Hughes Aircraft Company, George Buchanan
Industry Council for Technology in Learning, Thomas West
International Communications Association
Jet Propulsion Laboratory, James E. Jacobson
Kaiser Permanente Medical Group, Joseph K. Beaupre
Korean Youth Center, Bong Hwan Kim
League of California Cities, Jacki Bachrach, Walter Siembab
Lincoln High School, Ann M. Quinn
Los Angeles Community Colleges, Wallace B. Knox
Los Angeles Metro Transportation Authority, Daniel Wright
Metropolitan Fiber Systems, Royce Holland, Cindy Schonhaut
MCI Telecommunications Corporation, Richard Severy

MTRW, Incorporated, Matthew A. Martinez, Mark Thompson
Montgomery Securities, Paul Evenson
The Honorable Gwen Moore, Chair, Utilities and Commerce Committee, California
State Assembly
Multimedia Development, Tim Boyle
National Telecommunications and Information Administration, U. S. Department of
Commerce
New York Public Service Commission
A. Michael Noll, University of Southern California
North Peninsula Neighborhood Service Center Inc., Ortensia Lopez
Northern Telecom, Incorporated, Ed St. Croix, Kent Hughes, Douglas G. Martin
Oakland Chamber of Commerce, Robert L. Toney
Pacific Bell, Lee Camp, Pat Lanthier, John A. Gueldner, Steve Harris
Pacific Telesis Group, Elliot Maxwell
Prodigy, George Perry
RAM Mobile Data, Steve Apicella
The Honorable Herschel Rosenthal, Chair, Energy and Public Utilities Committee,
California State Senate
Roseville Telephone, Greg Gierczak
Sandia National Laboratories, John C. Crawford
The San Francisco Hispanic Chamber of Commerce, Carlos A. Quiroz
San Francisco Multimedia Development Group, Tim Boyle
San Mateo County Economic Development Association, Denise de Ville
Self Help for the Elderly, Anni Chung
Marvin A. Sirbu, Carnegie Mellon University
Smart Valley, Incorporated, John Young
Southern California Association of Governments, Mark Pisano
Sprint Communications Corporation, David E. Scott
Sun Microsystems, Incorporated, John Gage
Teleport Communications Group, Michael Morris
Time Warner Broadcasting, Paul Jones
Toward Utility Rate Normalization, Regina Costa, Thomas Long
Utility Consumers Action Network, Michael Shames
U. S. Office of Technology Assessment, U. S. Congress
University of San Diego, Privacy Rights Clearinghouse, Beth Givens
University of San Francisco, Heather Hudson
Vision por Cable de Mexico, Rubin Alegre Bojorquez
Whittle Communications, Chanel One, Theresa Devries

World Institute on Disability, Deborah Kaplan

APPENDIX 3

**Agendas from Public Hearings
March - July 1993**

The Commission held a series of three public hearings at which business and community leaders, interested citizens, as well as industry experts from around the country, testified either in person or remotely via video links before a panel of Commissioners.

See the following pages for the complete agendas.

California Public Utilities Commission

FULL PANEL HEARING

Current Status of California's
Telecommunications Infrastructure

April 14, 1993
San Francisco, California
Auditorium
505 Van Ness Avenue
San Francisco, CA 94102

- I. Welcome by President Fessler (8:15)
- II. Opening Comments by Commissioners (8:20 - 8:30)
- III. Overview (8:30 - 9:00)
 - Dr. Bill Davidson, Center for Telecommunications Management, University of Southern California
 - Dean A. Michael Noll, Annenberg School for Communication, University of Southern California

IV. Session A (9:00 - 10:10)

Status of California's Telecommunication Infrastructure Serving Business and Industrial Customers.

- GTE California: Thomas Sweet, Director Area Planning and Engineering
- Teleport: Michael Morris, Director Regulatory and External Affairs
- 10 Small LECs: Alvin Pelavin, Partner, Cooper, White and Cooper
- MCI: Richard Severy, Director Regulatory and Government Affairs
- BT North America: Ron Bamberg, V.P. Business Development
- RAM Mobile Data: Steve Apicella, Vice-President
- First Pacific Networks: Earl Thelen, Vice President and General Manager of the Utility Systems Business Unit

Topics:

What is your role in providing telecommunications Infrastructure?
What infrastructure do you provide and what infrastructure do you utilize?

Discuss how well California's Telecommunications Infrastructure meets the existing needs of California business and industry. Please give specific examples of how existing telecommunications needs are, or are not, being met by the existing telecommunications infrastructure.

Break (15 minutes)

V. Session B (10:25 - 11:25)

Status of California's Telecommunications Infrastructure Serving Residential and Small Business Users.

- Pacific Bell: Lee Camp, Vice President Pacific Bell, CEO Pacific Bell Information Services
- Cable TV Ass.: Mr. Ron Cooper, Senior V.P. Continental Cablevision
- Roseville Telephone: Greg Gierczak-Director Regulatory
- AT&T: Jack Harrington, Regional V.P Network Systems
- Metropolitan Fiber System: Royce Holland, President
- Prodigy: George Perry, Senior V.P. and General Counsel
- Cellular Carriers Association of California: Stephen Carlson, Executive Director

Topics:

What is your role in providing telecommunications infrastructure?
What infrastructure do you provide and what infrastructure do you utilize?

Discuss how well California's Telecommunications Infrastructure meets the existing needs of California residential and small business users. Please give specific examples of how existing telecommunications needs are or are not being met by the existing telecommunications infrastructure.

VI Session C. (11:25 - 12:25)

Status of California's Telecommunications Infrastructure Serving Special Needs in Education, Health Care, Government and Transportation.

- Citizens Utilities: Arthur Smithson, President Telecommunications Management Services
- Cable TV Ass.: Robert McRann, Sr. V.P. Cox Cable of San Diego
- Kaiser Permanente Medical Group: Joseph K. Beaupre
- Whittle Communications, Channel One: Theresa Devries, Director of School Relations
- League of California Cities: Jacki Bacharach, Chair League Committee on Telecommuting
- California State Universities: Laura Guillory, Office of the Chancellor

Topics:

What is your role in providing telecommunications infrastructure?
What infrastructure do you provide and what infrastructure do you utilize?

Discuss how California's Telecommunications Infrastructure meets existing, educational, health care, government agency, and

telecommuting needs. Please give specific examples of how existing telecommunications needs are or are not being met by the existing telecommunications infrastructure.

VII. Commissioner's Concluding Remarks (12:25-12:30)

Before the California Public Utilities Commission
Second Telecommunications Infrastructure
Full Panel Hearing

THE EVOLVING TELECOMMUNICATIONS INFRASTRUCTURE
THE VISION FROM THE USERS PERSPECTIVE

June 1, 1993
U.S. Ninth Circuit Court of Appeals
125 South Grand Avenue
Pasadena, California
9:30am - 3:30pm

*What capabilities will be needed in the future?
How will these capabilities be used?
What benefits will accrue to Californians?*

I. *Commissioner Opening Comments (9:30-9:40)*

II. *Overview: Information Age Visionaries (9:40-10:00)*

TIME WARNER BROADCASTING: Paul Jones, Senior Vice President Corporate
Development
AT&T: Ellwood Kerkeslager, Vice-President Technology and Infrastructure

III. *Telecommunications and Critical Community and Public Services (10:00-10:40)*

CITY OF LOS ANGELES: Susan Herman, General Manager Department of
Telecommunications
TURN: Regina Costa, Telecommunications Analyst
SELF-HELP FOR THE ELDERLY: Anni Chung, Executive Director
WORLD INSTITUTE ON DISABILITY: Deborah Kaplan, Director, Division on
Technology Policy

Break (10:40-10:50)

IV. *Telecommunications and Business Growth and Development (10:50-11:30)*

DOLE FOODS: Ben Zemel, Manager Operations and Telecommunications
VISION POR CABLE DE MEXICO: Rubin Alegre Bojorquez, Technical Director
MONTGOMERY SECURITIES: Paul Evenson, Vice President
CALIFORNIA BANKERS CLEARING HOUSE ASSOCIATION: George Cheng,
Senior Vice President Bank of America
CALIFORNIA HISPANIC CHAMBERS OF COMMERCE: Manuel Rosales, Pres.

V. *Telecommunications and Alternate Providers (11:30-12:10)*

What access to the local network do you need?
What services will be provided?
How will the capabilities of Alternate Providers benefit Californians?

MFS COMMUNICATIONS COMPANY, INC.: Royce Holland, President
CALIFORNIA PAYPHONE ASSOCIATION: Randy Kuhlmann, President Amtel
Communications
CALIFORNIA CELLULAR RESELLERS ASSOCIATION, INC.: Peter Casciato
CALIFORNIA CABLE TELEVISION ASSOCIATION: Dale Bennett, Vice
President and State Manager of TCI Cable vision
PACIFIC BELL: Pat Lanthier, Director Public Policy and Technology

Lunch (12:10 - 1:30)

VI. *Telecommunications and Education (1:30-2:00)*

CLEAR VIEW ELEMENTARY SCHOOL: Ginger Hovenic, Principal
LINCOLN HIGH SCHOOL: Ann Quinn
INDUSTRY EDUCATION COUNCIL OF CALIFORNIA: Thomas West, Asst.
Vice-Chancellor for Information Resources and Technology for CSU
CALIFORNIA DEPARTMENT OF EDUCATION: William Padia, Director
Research, Evaluation and Technology Division

VII. *Telecommunications and Transportation (2:00 - 2:25)*

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS: Mark Pisano,
Executive Director
MTRW, INC.: Mark Thompson, President
LOS ANGELES METRO TRANSPORTATION AUTHORITY: Daniel Wright

Break (2:25-2:35)

VIII. *Scientific and High Tech Industries (2:35 - 2:55)*

JET PROPULSION LABORATORY: James Jacobson, Chief Technologist,
Advanced Communications
HUGHES AIRCRAFT COMPANY: George Buchanan

IX. *Information Services and Entertainment (2:55 - 3:15)*

CALIFORNIA STATE LIBRARY: Cameron Robertson, Assistant State Librarian
GENIUS INCORPORATED: Bryon D Wagner
MULTIMEDIA DEVELOPMENT: Tim Boyle, Acting Executive Director

X. *Commissioner Closing Comments (3:15-3:30)*

CALIFORNIA PUBLIC UTILITIES COMMISSION

THIRD TELECOMMUNICATIONS INFRASTRUCTURE
FULL PANEL HEARING

July 1, 1993

State Board of Equalization
450 N Street,
Sacramento, California

"HOW SHOULD THE FUTURE INFRASTRUCTURE NEEDS OF
CALIFORNIA BE MET?"

I. INTRODUCTION (30 minutes) (9:00 - 9:30)

A. OPENING REMARKS BY COMMISSIONERS

President Fessler
Commissioner Eckert
Commissioner Shumway
Commissioner Conlon

B. REMARKS BY INVITED DIGNITARIES

Senator Rosenthal
Assemblywoman Moore

II. OVERVIEW SPEAKERS (60 minutes) (9:30-10:30)

- Mitchell Kapor: President, Electronic Frontier Foundation [Video link]
- Francois Bar: Program Director, Berkeley Roundtable on the International Economy
- Roy Anderson: Co-Chair, Project California
- Lee Selwyn: President, Economics and Technology, Inc. [Video link]
- John Gage: Director, Science Office, Sun Microsystems Inc.
- Ed St. Croix, Vice-president Business Development, Northern Telecom.

Break (10:30 - 10:45)

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III. ALTERNATIVE VIEWS ON PUBLIC POLICY FOR INFRASTRUCTURE

PANELS:

A. LOCAL TELEPHONE COMPANY PERSPECTIVE
(50 minutes) (10:45 - 11:35)

Presenter

-Lee Camp, President and CEO, Pacific Bell Information Services

Commenters

-Lee Selwyn: President, Economics and Technology, Inc.
[Video link]

-Alan Gardner: Vice President, Regulatory and Legal Affairs,
California Cable Television Association

-Barbara Burger: Regional Manager Regulatory Affairs,
GTE- California

-Ed Texeira: Director, Division of Ratepayer Advocates, CPUC

B. CABLE TELEVISION AND WIRELESS PERSPECTIVE
(50 minutes) (11:35 - 12:25)

Presenter

-Robert McRann: Senior Vice President and General Manager,
Cox Cable San Diego

Commenters

-Michael Shames: Executive Director, UCAN [Video link]

-Heather Hudson: Director Telecommunications Program,
University of San Francisco

-Richard A. Bromley: Vice President, Government Affairs, AT&T

-Elliot Maxwell: Assistant Vice President, Corporate Strategy,
Pacific Telesis Group

Lunch Break (12:25 - 1:30)

Presentation: Innovations in a Multi-Provider Environment
(20 minutes) (1:30-1:50)

-John Young: Chair, Smart Valley Inc. [Video link]

-John Eger: Chair, City of the Future Committee, San Diego
[Video link]

C. INTEREXCHANGE AND PUBLIC DATA NETWORK PERSPECTIVE
(45 minutes) (1:50-2:35)

Presenter

-David E. Scott: Assistant Vice President, Strategic Planning,
Sprint Communications Corp.

Commenters

-Barbara O'Connor: Director, Institute for the Study of Politics
and Media, California State University

-Elliot Maxwell: Assistant Vice President, Corporate Strategy,
Pacific Telesis Group

-Marvin Sirbu: Professor of Engineering and Public Policy,
Carnegie Mellon University [Video link]

-Thomas Long: Staff Attorney, TURN

Break (2:35-2:45)

D. ALTERNATIVE ACCESS PROVIDER PERSPECTIVE (45 minutes)
(2:45-3:30)

Presenter

-Gail Garfield Schwartz: Vice President, Government Affairs,
Teleport Communications Group

Commenters

-Marvin Sirbu: Professor of Engineering and Public Policy,
Carnegie Mellon University [Video link]

-Anna Alvarez Boyd: Director of Advocacy and Special Projects,
Consumer Action

-Barry Ross: Executive Vice President,
California Telephone Association

IV. SUMMARY REMARKS BY COMMISSIONERS (15 minutes) (3:30-3:45)

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Questions to be addressed:

1. Do the economics of advanced networks favor building from scratch or adapting existing networks?
2. Should the Commission encourage integrated networks or separate networks for separate purposes?
3. Should the definition of "basic service" be expanded beyond voice capabilities? If so, who should pay and what would be included?
4. Should the Commission expand the definition of universal access beyond network services to include premises equipment affordability, applications availability and user education. If so, who should pay and what would be included?
5. What common carrier obligations should non-traditional network providers have?
6. What, if anything, should the Commission do to facilitate trials of new telecommunications services and information applications?
7. Should the Commission push for interconnection and interoperability standards? How and by whom?
8. If the Commission encourages multiple providers of advanced network services, what alternative funding mechanisms, if any, should be developed to support universal services?
9. If the Commission encourages multiple providers, what steps should it take to lower barriers to competitive entry and innovation?

APPENDIX 4

Assessment of California's Telecommunications Infrastructure Today

The beginning of Staff's investigation included an evaluation of California's infrastructure in terms the regulated telephone utilities network investments -- measuring technology" deployed compared to other states. The Commission Staff's report, entitled "Staff Background Report, An Assessment of California's Telecommunications Infrastructure Today", found that California's telephone infrastructure is similar to that of other major states in terms of modernization. Contained in the report, the statistical analysis of telephone company networks show that the level of deployment of standard technologies such as digital switching, common channel signalling, Integrated Services Digital Network ("ISDN") capabilities and fiber optic cable in California is typical of those states examined. Furthermore, the plans of California's major telephone companies for the future deployment of technologies are generally similar to the deployment schedules adopted in formal plans of other states.

A shortcoming of this type of comparison of technology deployment by state is that these comparisons are based primarily on technologies used by local telephone companies and ignore innovative networks of alternative service providers. In California, as is the case throughout the nation, a substantial portion of the existing infrastructure is supplied by major networks other than the local telephone network. Video transmission is primarily supplied by cable television networks. The bulk of data services in the state is provided by unregulated public data networks and other providers. Comparisons which only use local telephone company data fail to reflect these major segments of existing infrastructure in each state.

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Each of these observations suggest that although a simple cross-state comparison is worthwhile as background, it is of limited value. As we explain in the this report, a great deal of uncertainty exists about the direction and rate of technological innovation and evolution of new services markets. With this basic uncertainty it is not possible to be certain what combination of technologies will be most efficient or most effective at meeting future user needs. Yet a simple comparison of the amount of known technology deployed ignores the growing possibility over time that the technologies being tracked may become inferior to newer technologies.

Finally, and probably most important, simple comparisons of the amount of standard technologies deployed fail to account for differences in the technology *needs* of individual states. These differences may be due to the varying kinds of industries and customers that comprise local markets, as well as the density and distance between major markets. These differences may be particularly significant in evaluating the infrastructure of a state as unique as California. A competitive strategy for the state must be geared to the particular needs of California users, and the particular strengths of California businesses. Copies of the background report can be obtained from the Commission's Division of Strategic Planning, 505 Van Ness Avenue, San Francisco, California 94102.

NOTES

1. As elsewhere in this report, the term "consumers" itself includes individual business users as well as whole organizations and individuals who use products and services to address personal needs.
2. Testimony of Camp, July 1, 1993 public hearing.
3. Testimony of Young, July 1, 1993 public hearing.
4. National Telecommunications and Information Administration, (NTIA) Department of Commerce, NTIA Infrastructure Report: Telecommunications in the Age of Information, October, 1991, p. 21.
5. Francois Bar and Michael Borrus, The Future of Networking, First Draft, Berkeley Roundtable on the International Economy, March 16, 1993. Also, testimony of Anderson, July 1, 1993 public hearing.
6. Ibid, pp. 23-27.
7. One industry analyst has suggested that public policies toward infrastructure may be classified into one of three categories: "prohibit, permit, or promote". These three categories are useful as a way of envisioning a logical progression in which an infrastructure strategy can develop. "Prohibit" policies shape infrastructure by attempting to prevent conflicting private initiatives. "Permit" policies rely on market forces as the primary guiding force for infrastructure development. "Promote" policies attempt to shape infrastructure directly by affirmatively encouraging specific infrastructure.
8. Conversely, good policies for one state may be bad policies in another state. See Porter, Michael, The Competitive Advantage of Nations, The Free Press, 1990, pp. 623-624.
9. Ibid, p. 621.
10. These are the areas of economic regulation we propose. We anticipate the continuation of any necessary environmental health and safety regulation as well.
11. Testimony of Holland, April 14, 1993 public hearing; Kerkeslager, June 1, 1993 public hearing; Kapor, Anderson, Selwyn, Gage, Gardner, McRann, Young, and Schwartz, July 1, 1993 public hearing.
12. Testimony of Eger, July 1, 1993 public hearing.

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13. Letter from Roy Anderson, Project California, to Commissioner Patricia M. Eckert, August 13, 1993.
14. Some parties conveyed support for the zone concept in written correspondence received by the Commission subsequent to its last public hearing. A greater number of parties expressed significant concern about the zone concept. Such parties included, among others, Teleport Communications Group, the California Cable Television Association, GTE Corporation, MCI Telecommunications Corporation, Sprint, and Prodigy Services Company. Some parties, such as Pacific Bell, expressed qualified support for the zone concept, but suggested that a statewide approach to competition might be preferable.
15. Testimony of Bar, Anderson, Selwyn, Gage, Camp, Gardner, McRann, Bromley, Maxwell, Young, Sirbu, and Schwartz, July 1, 1993 public hearing.
16. Testimony of Kapor, July 1, 1993 public hearing. Also: Computer Systems Policy Project (CSPP), Perspectives on the National Information Infrastructure: CSPP's Vision and Recommendations for Action, January 12, 1993, p. 17.
17. A leading proponent of ISDN capability as a basic level of service has been the Electronic Frontier Foundation (EFF). More recently, EFF has acknowledged the attractiveness of alternate technologies for digital access over copper lines, such as Asymmetrical Digital Subscriber Line (ADSL).
18. Testimony of Kapor, July 1, 1993 public hearing.
19. Testimony of Kaplan and Boyd, June 1, 1993 public hearing.
20. Testimony of Anderson, Gardner, Texeira, Young, Schwartz, Selwyn, and McRann, July 1, 1993 public hearing. Also written submission of the California Department of Consumer Affairs, May 25, 1993. Also the regional Bell companies' An "Infostructure" for All Americans: Creating Economic Growth in the 21st Century, April 1993, and the NTIA Report entitled, The National Information Infrastructure: Agenda for Action, September 1993.
21. Testimony of Sirbu at the July 1, 1993 public hearing, recommending a competitive mechanism for awarding universal service funding.
22. In this environment of rapid change, a traditional utility view of telecommunications infrastructure crumbles. When technologies and the cost of providing service are fairly stable, it is often argued that large "scale economies" favor having a single provider of service -- that is, it is cheaper for a single provider to do all the wiring and switching in a coordinated and bulk fashion than it is to have lots of competitors become small-time providers, each with substantial overhead and less buying power from vendors. If technologies are changing every couple years so that the overall cost of service is dropping

rapidly, a provider of service who waits a relatively short amount of time can have a cost advantage over an earlier provider even if the later competitor has a much smaller piece of the market. With the prevalence of microprocessors, many modern telecommunications technologies have much smaller scale economies.

23. Testimony of Gail Garfield Schwartz, July 1, 1993 public hearing, p.172.
24. Statement of AT&T submitted to the Commission, May 14, 1993.
25. Among these applications are high-performance computing, shared computer-assisted design and engineering, and "virtual reality" multimedia.
26. July 1, 1993 public hearing, p: 27.
27. Eger, John, "Technology Rings Up World", San Diego Union-Tribune, June 14, 1992.
28. July 1, 1993 public hearing, p. 23.
29. The staff background report, developed as part of this infrastructure examination, concludes that California's current telecommunications infrastructure is comparable to that of other major states and states with formal infrastructure plans. Division of Strategic Planning, Staff Background Report: An Assessment of California's Telecommunications Infrastructure Today, California Public Utilities Commission, July 1993.
30. Ibid.
31. Testimony of Francois Bar, Alan Gardner, and Marvin Sirbu, July 1, 1993 public hearing. Also, Bar and Borrus (1993). Also, Sirbu, "Telecommunications Technology and Infrastructure", in the Institute for Information Studies report, A National Information Network: Changing Our Lives in the 21st Century, 1992.
32. Bar and Borrus (1993), and the testimony of Bar at the July 1, 1993 public hearing.
33. Testimony of Kapor, July 1, 1993 public hearing, p. 20.
34. Testimony of Kapor and Gage, July 1, 1993 public hearing.
35. Testimony of Kapor, July 1, 1993 public hearing. Also Shooshan III, Harry, ISDN and The Public Switched Network: Building an "Open Platform", National Economic Research Associates, Inc., (NERA).
36. Fleming and McLaughlin, "ADSL: The On-Ramp to the Information Highway," Telephony, July 12, 1993.

37. Testimony of Kapor, July 1, 1993 public hearing, p. 20-21.
38. At very short distances within office buildings, copper wires used in data networks can carry 100 mbps of traffic -- well into broadband range.
39. Statement of AT&T submitted to the Commission, May 14, 1993, p. 2.
40. Testimony of Gardner, July 1, 1993 public hearing.
41. Testimony of Young, Scott, O'Connor, and Sirbu, July 1, 1993 public hearing.
42. Milton Mueller, "Universal Service in Telephone History," Telecommunications Policy, July 1993, pp. 352-369. Mueller argues that early competition between Bell and independent networks which were *not* interconnected fueled rapid service penetration in the United States relative to other countries.
43. Testimony of Sirbu, July 1, 1993 public hearing.
44. We only consider one major difference between automotive and telecommunications infrastructure in the discussion. There are a number of other important ones, including the high rate of technology change in telecommunications.
45. See June 30, 1993 letter to CPUC President Fessler, from Tom Mossman, President Alliance for Distance Education in California.
46. As with all infrastructure investments, the benefits of having a particular advanced network capability deployed more ubiquitously must be balanced against the cost of widespread deployment.
47. Computer Systems Policy Project (1993), p. 13.
48. Testimony of Piasano, Martinez, and Write, June 1, 1993 public hearing, pp.129-140. Also testimony of Bacharach, April 14, 1993 public hearing, pp.159-166.
49. NTIA (1991), p. 80.
50. Testimony of Wright, June 1, 1993 public hearing, p. 141-142.
51. Frank Tanaka quoted by Barry Miller "If you were telecommuting you'd be right home now.", Government Technology, July, 1993, p. 48.
- 52.. NTIA (1991), p. 80.
53. Testimony of Bacharach, April 14, 1993 public hearing, p. 162.

54. Spayed, "Increasingly in Area, Home is where the Workplace Is." Washington Post, April 22, 1991, p. A15.
55. June 1, 1993 public hearing, p. 141.
56. Some applications continue to be developed on an analog basis. Voice and broadcast video are naturally analog in format, and some transmission systems for these types of information may continue to be analog for an extended period of time.

Enhancing California's Competitive Strength:

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GLOSSARY

ADSL: Acronym for Asymmetrical Digital Subscriber Line. Technology that will allow multiple, simultaneous high-speed services to be carried over existing twisted pair, thus dramatically increasing the potential of installed copper networks. Most of the capacity is devoted to distribution of video "downstream" to consumers.

Audiotex: A generic term for services that allow consumers to retrieve recorded voice information over the phone.

Bandwidth: Bandwidth is a measure of the information carrying capacity of a channel. The more bandwidth a network has, the more information it can carry.

Basic Rate Interface: A form of ISDN service that provides the equivalent of two 64 Kbps lines, each capable of carrying a voice conversation or data communications and a third 16 Kbps line capable of transmitting data, thus allowing more information to be carried over existing copper plant.

Bit: A binary unit of information that can have either of two values, 0 or 1. The most basic way of storing and transmitting digital information. Contraction of binary digit. Kilobit=one thousand bits; Megabit=one million bits; Gigabit=one billion bits; Terabit=one trillion bits.

Broadband: Transmission speeds of 45 Mbps (45,000,000 bits per second) or greater. A single broadband facility of 45 Mbps can carry 672 voice conversations. Some broadband facilities have transmission speeds in the billions of bits per second (gigabits per second of Gbps).

Connectivity: Ready availability and usability of telecommunications capabilities.

Digitalization: Conversion of analog or continuous signals into a series of ones and zeroes, i.e. into digital format.

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Distance Learning: Instruction in which the pupil and instructor are in different locations and interact through the use of computer and communications technology.

Externalities: Consequences of a purchasing decision that are not considered by the buyer or seller. Negative externalities include environmental pollution that creates costs or disadvantages for people not party to the economic transaction. Positive externalities include general economic benefits resulting from telecommunications services beyond those reflected in the carriers' revenue.

HDSL: Acronym for High bit rate Digital Subscriber Line. Like ADSL, HDSL is a technology designed to expand the capability of the installed copper distribution system. However, HDSL is not oriented specifically toward video distribution.

ISDN: Integrated Services Digital Network. A switched network design that serves as a flexible pipeline, simultaneously transporting voice, data, and video information.

Interconnection: The connection of telephone equipment to the network, also the connection of one carrier with another, i.e. the interface between carriers.

Internetworking: The ability for networks to interface with one another, based upon standardization.

Interoperability: The condition achieved among communications-electronics systems or equipment when information or services can be exchanged directly between them or their users, or both.

Lifeline: Program that assures access to telephone service to every California resident by allowing a discount on monthly bills to eligible low-income subscribers.

Narrowband: Transmission speeds of less than 64 kbps.

POTS: Acronym for Plain Old Telephone Service; basic telephone service.

Primary Rate Interface: A higher capacity form of ISDN. It can provide 23 voice grade (64 kbps) channels and one 16 Kbps channel, allowing a total of 1.5 Mbps transmission capability.

Protocol: The rules for communication system operation which must be followed if communication is to be effected; the complete interaction of all possible series of messages across an interface. Protocols may govern portions of a network, types of service, or administrative procedures.

Telecommuting: The use of telecommunications as a substitute for travel to and from work.

Teleconferencing: A conference between persons linked by a telecommunications system. Can be audio only; can be video one-way and audio the other; can be video both ways.

Telemedicine: The application of telecommunications and information resources to the health field to facilitate delivery of medical information to both practitioners and consumers.

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Additional copies of this report are available. Single copies may be obtained free of charge by calling (415) 703-1713.

Multiple copies may be obtained at a cost of five dollars each. Please mention the title of this report, *Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure*, and address your request with a check or money order for extra copies to:

California Public Utilities Commission
Fiscal Office
505 Van Ness Avenue
San Francisco, CA 94102-3298

REQUEST FOR PROPOSAL

10716

KING COUNTY
 PROCUREMENT AND CONTRACT
 SERVICES DIVISION
 620 K.C. ADMIN. BUILDING
 500 - 4TH AVENUE
 SEATTLE, WASHINGTON 98104
 (206) 296-4210
 (206) 296-4211 FAX



PROPOSAL NUMBER: 122-99KJF		
PROPOSAL OPENING DATE:	May 27, 1999	TIME: 2:00 P.M.
ALL PROPOSALS MUST BE SUBMITTED TO THE PURCHASING AGENCY NO LATER THAN 2:00 P.M. EXACTLY		
BUYER:	Karen Fitzthum	<i>K.F.</i>
REQUISITION #: 02871		

ISSUED: May 6, 1999

FOR: TELECOMMUNICATIONS AND TECHNOLOGY CONSULTANT
 KING COUNTY COUNCIL

Sealed bid proposals are hereby solicited and will be received only at the office of the King County Procurement Services Division in Room 620 of the King County Administration Building, 500 Fourth Avenue, Seattle, Washington 98104 for a Telecommunications and Technology Consultant for the County Council. These services shall be provided to King County in accordance with the following and the attached instructions, requirements, and specifications.

Submission: King County requires the proposer to sign and return *this entire RFP document*, excluding attachments, to provide *one photocopy* of the signed RFP (two items). The proposer shall provide *one unbound original* and *(5) copies* of the proposal response, data or attachments offered (six items). The original in both cases shall be sealed or stamped "Original".

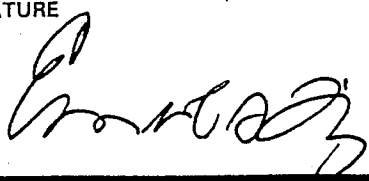
Proposers are urged to use recycled/recyclable products and both sides of paper for printed and photocopied materials, whenever practicable, in preparing responses to this RFP.

Proposal Conference: A conference to discuss questions related to this RFP shall be held at 10:00 a.m., Friday, May 17, 1999 in Conference Room #610, sixth floor, King County Administration Building, above address.

Questions: After the Pre-Proposal Conference, Proposers will be required to submit any further questions in writing prior to the close of business, to the above address, in order for staff to prepare any response required to be answered by Addendum.

NOTE: INFORMATION WITHIN BORDERED AREA MUST BE COMPLETED AND SIGNED.

This document can be made available from the ADA Liaison, at (206) 296-4210 or TDD (206) 296-0100, in large print, audio cassette, or Braille

FULL NAME OF OFFEROR/CONTRACTOR (PRINT OR TYPE) ERNEST S. TING AND ASSOCIATES			NAME OF AUTHORIZED REPRESENTATIVE (PRINT OR TYPE) ERNEST S. TING		
ADDRESS 3800 MONTEPEY BLVD.			TITLE PRINCIPAL		
CITY OAKLAND	STATE CA	ZIP 94619	SIGNATURE 		
TELEPHONE NUMBER (510) 530-3588		FAX NUMBER (510) 530-2012			

SECTION I - GENERAL INFORMATION

- A. King County is an Equal Opportunity Employer and does not discriminate against individuals or firms because of their race, color, creed, marital status, religion, age, sex, national origin, sexual orientation, or the presence of any mental, physical or sensory handicap in an otherwise qualified handicapped person.
- B. In accordance with the provisions of Washington Initiative 200, no County Minority and Women Business (M/WBE) utilization requirements shall apply to this Contract. No minimum level of M/WBE subcontractor participation or purchase from M/WBE certified vendors is required and no preference will be given by the County to a bidder or proposer for their M/WBE utilization or M/WBE status. Provided, however, that any affirmative action requirements set forth in any federal regulations or statutes included or referenced in the Contract documents will continue to apply. King County encourages the utilization of minority owned businesses and women-owned businesses ("MBEs" and "WBEs"; collectively, "M/WBEs") in County contracts.
- C. All proposals submitted and evaluation materials become public information and may be reviewed by appointment by anyone requesting to do so *at the conclusion* of the evaluation, negotiation, and award process. This process is concluded when a signed contract is completed between King County and the selected Consultant. Please note that if an interested party requests copies of submitted documents or evaluation materials, a standard King County copying charge per page must be received prior to processing the copies. King County *will not* make available photocopies of pre-printed brochures, catalogs, tear sheets or audio-visual materials that are submitted as support documents with a proposal. Those materials will be available for review at King County Procurement.
- D. No other distribution of proposals will be made by the proposers prior to any public disclosure regarding the RFP, the proposal or any subsequent awards without written approval by King County. For this RFP all proposals received by King County shall remain valid for ninety (90) days from the date of submittal. All proposals received in response to this RFP will be retained.
- E. Proposals shall be prepared simply and economically, providing a straightforward and concise but complete and detailed description of the proposer's abilities to meet the requirements of this RFP. Fancy bindings, colored displays and promotional materials are not desired. Emphasis shall be on completeness of content.
- F. If a proposal contains any information that the proposer does not wish disclosed to the public or used for any purpose other than evaluation, all such information must be indicated with the following statement *on the front page* of the proposal:

The information contained on pages _____ shall not be duplicated or used in whole or part for any other purpose than to evaluate the proposal; provided that if a contract is awarded to this office as a result of or in connection with the submission of such information, King County shall have the right to duplicate, use or disclose this information to the extent provided in the contract. This restriction does not limit King County's right to use information contained herein if obtained from another source.

Although a proposer may identify material as proprietary or confidential, King County *may* be required to release the information based on Public Information Disclosure laws or requirements. If King County complies with such requirements, the County will inform the affected proposer in writing to the company, person and address noted on the front page of the RFP document. Proposers will have 10 calendar days from the date of such notice to take action to prevent the release of the information. Absent of that action, King County will make the documents available on the 11th calendar day of the date of original notice.

- G. Provided, the Washington State Public Disclosure Act (RCW 42.17) requires public agencies in Washington to promptly make public records available for inspection and copying unless they fall within the specified exemptions contained in the Act, or are otherwise privileged.
- H. King County reserves the right to reject any or all proposals that are deemed not responsive to its needs.

NAME OF OFFEROR: _____

Ernest J. Ting

RFP No. 122-99KJF

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- I. In the event it becomes necessary to revise any part of this RFP, addenda shall be provided to all proposers who received the basic RFP.
- J. King County is not liable for any cost incurred by the proposer prior to issuing the contract.
- K. A contract may be negotiated with the proposer whose proposal would be most advantageous to King County in the opinion of the King County Council, all factors considered. King County reserves the right to reject any or all proposals submitted.
- L. It is proposed that if a selection is made as a result of this RFP, a fixed price contract will be negotiated. Negotiations may be undertaken with the proposer who is considered to be the most suitable for the work. This RFP is primarily designed to identify the most qualified firm. Price and schedule will be negotiated with the "first choice" proposer; negotiations may be instituted with the second choice and subsequent proposer until the project is canceled or an acceptable contract is executed.
- M. Other departments within King County may desire to place orders against this contract. King County retains the right to add or delete departments as needed.
- N. The contents of the proposal of the selected proposer will become contractual obligations if a contract ensues. Failure of the proposer to accept these obligations may result in cancellation of their selection.
- O. A contract between the contractor and King County shall include all documents mutually entered into specifically including the contract instrument, the RFP, and the response to the RFP. The contract must include, and be consistent with, the specifications and provisions stated in the RFP.
- P. New releases pertaining to this RFP, the services, or the project to which it relates, will not be made without prior approval by, and then only in coordination with, the King County Council.
- Q. King County Code 4.16.025 prohibits the acceptance of any proposal after the time and date specified on the Request for Proposal. There shall be no exceptions to this requirement.
- R. King County agencies' staff are prohibited from speaking with potential proposers about the project during the solicitation.

Please direct all questions to:

Karen Fitzthum
Buyer
(206) 205-5428
karen.fitzthum@metrokc.gov

If a contract is awarded based on this RFP, it will contain the following provision:

Contract Extension

The contract period may be extended in one (1) year increments for two (2) additional one-year periods in accordance with the County's best interest and at the sole option of the County. The price(s) submitted shall be the maximum allowed during the life of the entire contract.

SECTION II – PROJECT SPECIFICATIONS AND SCOPE OF WORK.

Introduction

The Metropolitan King County Council is seeking to hire a consultant or consulting firm with current telecommunications and technology credentials and specific experience relating to competition and consumer privacy issues in the field of telecommunications and internet services.

Background

February 1999, the Council adopted Ordinance 13409 which conditionally approved the transfer of control of TCI, a cable franchise holder in King County, to AT&T. The Council was unable to fully address the associated technical, economic, and policy questions within the short time available for their review of this transfer request. A primary concern to the Council in their consideration of this transfer was whether TCI/AT&T should be required to provide equal access to its cable internet modem service platform to internet service providers other than its affiliate AtHome Corporation. Consumer privacy concerns relative to the AtHome service also were of concern and were not resolved by this ordinance.

In order to consider these outstanding concerns, an expert review panel was established by Ordinance 13409 to further study the unresolved technical, economic, and policy issues and report back to the Council by October 8, 1999. The goals of the expert review panel were established by Ordinance 13409 and are summarized as follows:

Consider economic and technical arguments for and against the imposition of an equal access policy.

Provide an independent assessment of impact on competition and choice of providers.

The selection and establishment of the expert review panel currently is underway and is not an element of this request.

Scope of Work

Objective: The purpose of this Request for Proposal is to hire a consultant to staff and facilitate the deliberations of the expert review panel established by Ordinance 13409 and to prepare the panel's report for presentation to Council by October 8, 1999.

Consultant Responsibilities will include the following specific tasks:

Organize, schedule, and facilitate all meetings of the expert review panel.

Ensure that a work plan and timeline are delivered to the council budget chair and lead staff within ten (10) days of the first panel meeting.

Regularly inform Council budget chair and lead staff of expert review panel deliberations. Incorporate Council questions and concerns into the panel's deliberations.

Compile and analyze all pertinent available data necessary to address technical and policy questions and concerns considered by the panel.

Prepare report for Council with recommendations as to equal access requirements or alternative policy options that would protect competition:

Monitor related developments in other local jurisdictions as well as the federal arena and inform Council.

Deliverables

The primary deliverable is a written report containing the findings, analysis supporting the findings, conclusions, and recommendations of the expert review panel. The report is expected to be written in a clear and concise manner. A preliminary draft report shall be prepared by the consultant by September 8, 1999 and will be reviewed by the expert review panel for action by September 22, 1999. The consultant shall then prepare the final report by September 30, 1999 for review and action by the expert review panel. The consultant shall deliver an oral presentation of the final report to the Budget and Fiscal Management Committee during October, at a time mutually agreeable to the committee and panel.

NAME OF OFFEROR: _____

Ernest S. Ting

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The consultant will produce monthly status reports to include planned activities versus actual activities completed since the last status reports, and planned activities that will be undertaken and/or accomplished between the current status report period and the next status report period.

The consultant also is expected to prepare agendas and all other necessary communications for the efficient operation of the panel. It is anticipated that the expert review panel will set its own work plan and schedule to ensure that the work product is delivered on or before October 8, 1999. If they determine that a different deadline is required, that recommendation shall be presented to the budget committee for approval.

Reporting Structure

The Chair and Lead Legislative Analyst of the Budget and Fiscal Management Committee will supervise consultant services. The consultant will be expected to meet the lead analyst to review project progress on a semi-weekly basis.

Budget

The budget for this scope of work is limited. If sufficient funds are not available to complete the full scope of work for the project, the County reserves the right to reduce the scope of work or increase the amount of money available for the project. However, RFP respondents should include an estimate to perform the full scope of work (see 7.D.)

Proposal Format

The RFP submittal shall consist of (1) a letter of interest; (2) resume of consultant and any associates proposed for assignment to this project; (3) a client list from 1994-1999; (4) a comparable work sample; and (5) the proposal information which shall include the following:

- A. Provide a brief summary of your understanding of the outstanding issues and how an expert review panel might best approach the scope of work.
- B. Provide verification that the proposed personnel have the knowledge in the areas of monopoly/competitive analysis of telecommunications and/or technology sectors; regulatory practices and principles; and understanding of technical issues related to the provision of internet services.
- C. Provide a list of projects completed in the last 24 months, with references (names and phone numbers); provide summaries for similar projects completed in the last 24 months by the same personnel proposed in response to this RFP; please include references for each summary with a contact name and phone number.
- D. Provide a lump sum cost estimate for the project to include hourly rates for team members and all expenses that the County would be charged and how they were calculated.

Tentative Schedule for the Consultant Selection Process

Beginning the week of May 31 responses will be reviewed and ranked. Finalists may be required, at their expense, to be interviewed by the consultant review panel. By Friday, June 4, 1999 the finalist will be selected and notified.

Evaluation Criteria

Selection Process

Each proposal shall be examined to determine if it complies with the requirements and functional needs described in this RFP. A Technical Evaluation Committee according to the requirements outlined below will evaluate all proposals received. King County reserves the right to request a demonstration of the most responsive proposers.

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The total points possible for the written evaluation is 100. King County reserves the right to conduct interviews after written evaluations are completed. If interviews are conducted, the total possible points attainable in the interview phase would be 40. In this case, the total possible points will be 140.

Proposals will be ranked according to the following criteria:

Extent of experience evaluating issues of competitiveness and anti-competitive behavior in telecommunications and or technology markets and issues relating to access policies in multiple providers interconnected networks	25 points
Experience facilitating a related technical expert review panel	20 points
Knowledge of consumer privacy issues concerning telecommunications and information services	15 points
Experience communicating complex technical concepts, ideas and analyses in clear, concise terms.	25 points
Responsiveness to the scope of work and the clarity, organization and completeness of the proposal	15 points
Total for Written Evaluation	100 Points

Interview Points Available (if conducted)	40 Points
Total Points for Both Evaluations	140 Points

SECTION III - NONDISCRIMINATION AND AFFIRMATIVE ACTION

If a contract is awarded from this Request for Proposals, it will contain the following contract language:

PART 1 - NON-DISCRIMINATION

- A. King County Code Chapters 12.16 and 12.18 are incorporated by reference as if fully set forth herein and such requirements apply to this Contract; provided however, that no specific levels of utilization of minorities and women in the workforce of the Consultant shall be required, and the Consultant is not required to grant any preferential treatment on the basis of race, sex, color, ethnicity or national origin in its employment practices; and provided further that, notwithstanding the foregoing, any affirmative action requirements set forth in any federal regulations, statutes or rules included or referenced in the contract documents shall continue to apply.
- B. During the performance of this Contract, neither the Consultant nor any party subcontracting under the authority of this Contract shall discriminate nor tolerate harassment on the basis of race, color, sex, religion, nationality, creed, marital status, sexual orientation, age, or the presence of any sensory, mental, or physical disability in the employment or application for employment or in the administration or delivery of services or any other benefits under this Contract.
- C. The Consultant will, prior to the commencement of the work and during the term of this Contract, furnish the County, upon request and on such forms as may be provided by the County, a report of the affirmative action taken by the Consultant in implementing the terms of this section. The Consultant will permit access by the County to the Consultant's records of employment, employment advertisements, application forms, other pertinent data and records related to this Contract for the purpose of monitoring and investigation to determine compliance with these requirements.
- D. The Consultant will implement and carry out the obligations contained in its Affidavit and Certificate of Compliance regarding equal employment opportunity. Failure to implement and carry out such obligations in good faith may be considered by the County as a material breach of this Contract and grounds for withholding payment and/or termination of the Contract and dismissal of the Consultant.
- E. The Consultant shall comply fully with all applicable federal, state and local laws, ordinances, executive orders and regulations that prohibit such discrimination. These laws include, but are not limited to, RCW Chapter 49.60 and Titles VI and VII of the Civil Rights Act of 1964.
- F. During the performance of this Contract, neither the Consultant nor any party subcontracting under the authority of this Contract shall engage in unfair employment practices. It is an unfair employment practice for any:
1. Employer or labor organization to discriminate against any person with respect to referral, hiring, tenure, promotion, terms, conditions, wages or other privileges of employment;
 2. Employment agency or labor organization to discriminate against any person with respect to membership rights and privileges, admission to or participation in any guidance program, apprenticeship training program, or other occupational training program;
 3. Employer, employment agency, or labor organization to print, circulate, or cause to be printed, published or circulated, any statement, advertisement, or publication relating to employment or membership, or to use any form of application therefor, which indicates any discrimination unless based upon a bona fide occupation qualification;

NAME OF OFFEROR: _____

Ernest S. Ting **10716** EP No. 122-99KJF
6.4

4. Employment agency to discriminated against any person with respect to any reference for employment or assignment to a particular job classification;
5. Employer, employment agency or a labor organization to retaliate against any person because this person has opposed any practice forbidden by KCC Chapter 12.18 or because that person has made a charge, testified or assisted in any manner in any investigation, proceeding or hearing initiated under the provisions of KCC Chapter 12.18;
6. Publisher, firm, corporation, organization or association printing, publishing or circulating any newspaper, magazine or other written publication to print or cause to be printed or circulated any advertisement with knowledge that the same is in violation of KCC Chapter 12.18.030C., or to segregate and separately designate advertisements as applying only to men and women unless such discrimination is reasonably necessary to the normal operation of the particular business, enterprise or employment, unless based upon a bona fide occupational qualification; and/or
7. Employer to prohibit any person from speaking in a language other than English in the workplace unless:
 - a. The employer can show that requiring that employees speak English at certain times is justified by business necessity, and
 - b. The employer informs employees of the requirement and the consequences of violating the rule.

ART 2 - AFFIRMATIVE ACTION REPORTING AND REQUIRED SUBMITTALS

All Consultants entering into a contract or agreement with King County valued at \$25,000 or more shall, within ten days after the bidder receives written notice of selection, submit the following:

1. A Personnel Inventory Report on the form provided by the County. Subject to the provisions of KCC Chapter 12.16.060, the Consultant's Personnel Inventory Report shall be effective for two years after the date on which the report was submitted.
2. An Affidavit of Compliance demonstrating the Consultant's commitment to comply with the provisions of KCC Chapter 12.16.
3. A Sworn Statement of Compliance with KCC, Chapter 12.16 from all labor unions or employee referral agencies referring workers or employees or providing or supervising apprenticeship or other training programs from whom Consultant obtains employees.
4. ADA/504 Disability Assurance of Compliance and Corrective Action Plan.
5. As required by KCC Chapter 12.16, all Consultants entering into contracts with King County shall provide the County with assurance of their compliance with the provisions of Section 504 of the Federal Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. The Consultant shall complete and submit a Section 504 self-evaluation and corrective action plan. An assurance of compliance, must be signed and submitted to the County.
6. If the Consultant has previously submitted the Disability Assurance of Compliance form and Corrective Action Plan to the County, it is exempt from filing the Disability form for two years from the date it was received by the County.

The Consultant shall submit Personnel Inventory Reports, Affidavits and Certificates of Compliance and Sworn Statements of Compliance from its subconsultants, regardless of tier, in the same manner as required of the Consultant.

Assistance with the requirements of this Section and copies of Chapters 12.16 and 12.18 are available from the Minority and Women's Business Enterprise and Contract Compliance Division, phone (206) 684-1330.

ART 3 - NONDISCRIMINATION IN SUBCONTRACTING PRACTICES

1. Compliance with Initiative 200

In accordance with the provisions of Washington Initiative 200, no County Minority and Women Business (M/WBE) utilization requirements shall apply to this Contract. No minimum level of M/WBE subconsultant participation or purchase from M/WBE certified vendors is required and no preference will be given by the County to a bidder or proposer for their M/WBE utilization or M/WBE status. Provided, however, that any affirmative action requirements set forth in any federal regulations or statutes included or referenced in the Contract documents will continue to apply.

2. Non-Discrimination

During the term of this Contract, the Consultant shall not create barriers to open and fair opportunities to participate in County contracts or to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subconsultants and suppliers, the Consultant shall not discriminate against any person on the basis of race, color, creed, religion, sex, age, nationality, marital status, sexual orientation or the presence of any mental or physical disability in an otherwise qualified disabled person.

3. Record-Keeping Requirements

The Consultant shall maintain, for at least 12 months after completion of all work under this contract, records and information necessary to document its level of utilization of M/WBEs and other businesses as subconsultants and suppliers in this contract and in its overall public and private business activities for the same period. The Consultant shall also maintain, for at least 12 months after completion of all work under this contract, all written quotes, bids, estimates or proposals submitted to the Consultant by all businesses seeking to participate on this Contract. Consultant shall make such documents available to the County for inspection and copying upon request. If this contract involves federal funds, Consultant shall comply with all record keeping requirements set forth in any federal rules, regulations or statutes included or referenced in the contract documents.

4. Open Competitive Opportunities

King County encourages the utilization of minority owned businesses and women-owned businesses ("MBEs and "WBEs"; collectively, "M/WBEs") in County contracts. The County encourages the following practices to promote open competitive opportunities for small businesses including M/WBEs:

- 1) Attending a pre-bid or pre-solicitation conference, if scheduled by the County, to provide project information and to inform M/WBEs and other firms of contracting and subcontracting opportunities.
- 2) Placing all qualified small businesses attempting to do business in King County, including M/WBEs, on solicitation lists, and providing written notice of subcontracting opportunities to M/WBEs and all other small businesses capable of performing the work, including without limitation all businesses on any list provided by the County, in sufficient time to allow such businesses to respond to the written solicitations.
- 3) Breaking down total requirements into smaller tasks or quantities, where economically feasible, in order to permit maximum participation by small businesses including M/WBEs.
- 4) Establishing delivery schedules, where the requirements of this contract permit, that encourage participation by small businesses, including M/WBEs.

NAME OF OFFEROR: _____

Ernest S. Ting 107161

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- 5) Providing small businesses including M/WBEs that express interest with adequate and timely information about plans, specifications, and requirements of the contract.
- 6) Utilizing the services of available community organizations, Consultant groups, local assistance offices, the County, and other organizations that provide assistance in the recruitment and placement of small businesses including M/WBEs.

Further, the County encourages small businesses, including M/WBEs, to participate in the following practices to promote open competitive opportunities:

- 1) Attending a pre-bid or pre-solicitation conference, if scheduled by the County, to receive project information and to inform prime bidders/proposers of contracting and subcontracting capabilities.
- 2) Requesting placement on solicitation lists, and receipt of written notice of subcontracting opportunities.
- 3) Utilizing the services of available community organizations, Consultant groups, local assistance offices, the County, and other organizations that provide assistance in the recruitment and placement of small businesses and M/WBEs.

Sanctions for Violations

Any violation of the mandatory requirements of the provisions of this Section shall be a material breach of contract for which the Consultant may be subject to damages and sanctions provided for by contract and by applicable law.

ART 4 - REQUIREMENTS DURING WORK

Affidavits of Amounts Paid

Upon completion of all work and as a condition precedent to final payment, the Consultant shall submit a final Affidavit of Amounts Paid, identifying amounts actually paid and amounts owed to each subcontracting firm for performance under the Contract. Failure to submit such affidavits may result in withholding of payments or the final payment. Affidavit forms will be provided by King County.

Site Visits

King County may at any time visit the site of the work and the Consultant's office to review records related to actual utilization of and payments to subcontracting firms. The Consultant shall maintain sufficient records necessary to enable King County to review utilization of subcontracting firms. The Consultant shall provide every assistance requested by King County during such visits.

SECTION IV - GENERAL CONTRACT REQUIREMENTS

A. Changes

Either party may request changes in the scope of services and performing or reporting standards to be performed or provided herein. Proposal changes which are mutually agreed upon shall be incorporated by written amendment to the agreement by the King County Procurement Services Division.

3. Termination Clauses:

1. Termination for Convenience

The County for its convenience may terminate this contract, in whole or in part, at any time by written notice sent certified mail, return receipt requested, to the successful awardee. After receipt of a Notice of Termination, and except as directed by the contract administrator, the Successful Awardee shall immediately stop work as directed in the Notice, and comply with all other requirements in the Notice. The Successful Awardee shall be paid its costs, including necessary and reasonable contract close-out costs and profit on that portion of the work satisfactorily performed up to the date of termination as specified in the notice. The Successful Awardee shall promptly submit its request for the termination payment, together with detailed supporting documentation. If the Successful Awardee has any property in its possession belonging to the County, the Successful Awardee will account for the same and dispose of it in the manner the County directs.

2. Termination for Default

In addition to termination for convenience, if the Successful Awardee does not deliver supplies in accordance with the contract delivery schedule, or if the contract is for services and the Successful Awardee fails to perform in the manner called for in the contract, or if the Successful Awardee fails to comply with any other material provisions of the contract, the County may terminate this contract, in whole or in part, for default. Termination shall be effected by serving a Notice of Termination by certified mail (return receipt requested) on the Successful Awardee setting forth the manner in which the Successful Awardee is in default and the effective date of termination; provided that the Successful Awardee shall have ten (10) calendar days to cure the default. The Successful Awardee will only be paid for goods delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract less any damages to the County caused by such default.

The termination of this contract shall in no way relieve the Successful Awardee from any of its obligations under this contract nor limit the rights and remedies of the County hereunder in any manner.

3. Termination for Non-Appropriation

This contract may be canceled at the end of the then current fiscal period for non-appropriation of funds by the King County Council. Such cancellation shall be upon thirty (30) days written notice to the Successful Awardee. King County's fiscal period ends December 31 of each year. If the contract is terminated as provided in this subsection:

- a. The County will be liable only for payment in accordance with the terms of this contract for services rendered prior to the effective date of termination; and
- b. The Successful Awardee shall be released from any obligation to provide further services pursuant to the contract as are affected by the termination.

Funding under this contract beyond the current appropriation is conditional upon the appropriation by the County Council of sufficient funds to support the activities described in this contract. Should such an appropriation not be approved, the contract will terminate at the close of the current appropriation year.

Cancellation

King County reserves the right to terminate this contract at any time by five (5) days written notice to the contractor or to extend by contract amendment, agreed to by the contractor, the period of this contract.

Prime Contractor Responsibilities

The prime contractor will be required to assume responsibilities for all services offered in the proposal whether or not performed by the prime contractor. Further, the prime contractor will be the sole point of contact for King County with regard to contractual matters, including payment of any and all charges resulting from the contract. There will be no changes in the contract without approval of King County.

Non-Appropriation

King County may cancel the contract at the end of the then current fiscal period for non-appropriation of funds by the King County governing body. Such cancellation shall be upon 30 days written notice to the contractor. King County's fiscal period ends December 31 of each year.

SECTION V - ADDITIONAL INFORMATION & REQUIREMENTS**Disclosure**

King County Code 3.04.120 requires that anyone entering into a contract with a value of more than \$2,500 must file a disclosure statement with the Board of Ethics and the King County Executive.

The selected consultant agrees to the conditions of King County Code 3.04.120 and shall provide a Consultant Disclosure Form.

Non-Discrimination

1. The selected contractor shall comply with the applicable requirements of King County Code 12.16 regarding Discrimination in Employment. Submittal of Affirmative Action forms is required for initial approval and at annual intervals.
2. Federal, State, and local laws prohibit discrimination based on disability. Section 504 of the Rehabilitation Act of 1973, as amended, requires that all recipients receiving federal monies be accessible to qualified/eligible persons with disabilities. All organizations and firms contracting with King County, except those providing tangible goods, must comply with Section 504 accessibility requirements.

Fair Employment Practices

During the performance of this contract, neither the contractor nor any party subcontracting under the authority of this contract shall engage in unfair employment practices as defined by King County Code, Chapter 12.18. Failure to comply with this Chapter shall result in the Contractor being subject to the procedures and penalties set forth therein.

Insurance

The selected contractor shall furnish General Liability (Commercial General Liability) in the amount of \$1,000,000 combined single limit; \$2,000,000 aggregate. In addition, evidence of Workers' Compensation and Stop-Gap Employer's Liability shall be \$1,000,000. Further, evidence of Professional Liability (Errors and Omissions) shall be \$1,000,000. Such policy shall endorse King County, and its appointed and elected officials and employees as additional insureds.

King County reserves the right to approve deductible/self-insured retention levels and the acceptability of insurers. A copy of the King County Certificate of Insurance Form is available for review by calling King County Procurement Services at (206) 296-4210.

Indemnification and Hold Harmless:

1. In providing services under this Contract, the Contractor is an independent contractor, not an employee of the County for any purpose. The Contractor shall be responsible for all federal and/or state tax, industrial insurance, and Social Security liability that may result from the performance of and compensation for these services and shall make no claim of career service or civil service rights which may accrue to a County employee under state or local law.

The County assumes no responsibility for the payment of any compensation, wages, benefits or taxes to, or on behalf of, the Contractor, its employees or others by reason of this Contract. The Contractor shall protect, indemnify and save harmless the County, its officers, agents and employees from and against any and all claims, costs and losses whatsoever occurring or resulting from 1) the Contractor's failure to pay any such compensation, wages, benefits or taxes; and 2) the supplying to the Contractor of work, services, materials or supplies by agency employees or others in connection with the performance of this Contract.

2. The Contractor further agrees that it is financially responsible for and shall repay the County all indicated amounts following an audit exception which occurs due to the negligence, intentional acts or failure for any reason to comply with the terms of this Contract by the Contractor, its officers, employees, agents or representatives. This duty to repay the County shall not be diminished or extinguished by the prior termination of the Contract.
3. The successful awardee shall protect, defend, indemnify, and hold the County, its agents, employees, officials, and officers harmless from, and shall process and defend at its own expense any and all claims, demands, suits, penalties, losses, damages, or costs of any kind whatsoever (hereinafter "claims") brought against the County arising out of or incident to the execution of, performance of, or failure to perform this Contract; PROVIDED, however, that if such claims are caused by or result from the concurrent negligence of the successful awardee, its agents, employees, and/or officers and the County, its agents, employees, and/or officers, this paragraph shall be valid and enforceable only to the extent of the negligence of the successful awardee, its agents, employees, and/or officers; and, PROVIDED FURTHER, that nothing in this paragraph shall require the successful awardee to indemnify, hold harmless, or defend the County, its agents, employees, and/or officers from any claims caused by or resulting from the sole negligence of the County, its agents, employees, and/or officers. The successful awardee's obligation under this paragraph shall include indemnification for claims made by the successful awardee's own employees or agents. For this purpose, the successful awardee, by mutual negotiation, hereby waives, with respect to the County only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW. In the event the County incurs any judgment, award, and/or cost arising therefrom including attorneys' fees to enforce the provisions of this paragraph, and such fees, expenses, and costs shall be recoverable from the successful awardee.

Claims shall include, but not be limited to, assertions that the use or transfer of any software, book, document, report, film, tape, or sound reproduction or material of any kind, delivered hereunder, constitutes an infringement of any copyright, patent, trademark, trade name, or otherwise results in unfair trade practice.

NAME OF OFFEROR: _____

Ernest J. Tang

10716

Recycled/Recyclable Products

In accordance with King County Code 10.16, contractors are required to use recycled and recyclable products, and both sides of paper sheets for printed and photocopied materials, whenever practicable, in fulfilling contractual obligations to the County.

SECTION VI - MAINTENANCE OF RECORDS

The Contractor shall maintain accounts and records, including personnel, property, financial and programmatic records and other such records as may be deemed necessary by the County to ensure proper accounting for all project funds and compliance with this Agreement. All such records shall sufficiently and properly reflect all direct and indirect costs of any nature expended and services provided in the performance of this Contract.

These records shall be maintained for a period of six (6) years after termination hereof unless permission to destroy them is granted by the Office of the Archivist in accordance with RCW Chapter 40.14, or unless a longer retention period is required by law.

SECTION VII - AUDITS AND EVALUATION

The records and documents with respect to the Contractor's history of minority and women's business utilization and to all matters covered by this Contract shall be subject at all times to inspection, review, or audit by the County and/or federal/state officials so authorized by law during the performance of this Contract and six (6) years after termination thereof.

The Contractor shall provide right of access to its facilities, including those of any subcontractor, to the County, the state and/or federal agencies or officials at all reasonable times in order to monitor and evaluate the services provided under this Contract. The County will give advance notice to the Contractor in the case of fiscal audits to be conducted by the County.

The Contractor agrees to cooperate with the County or its agent in the evaluation of the Contractor's performance under this Contract and to make available all information reasonably required by any such valuation process. The results and records of said evaluation shall be maintained and disclosed in accordance with RCW Chapter 42.17.

SECTION VIII - EXHIBITS

The following sample forms have been included herein for the proposer's *information*. The awarded contractor shall complete the forms and comply with these requirements prior to contract award. **(DO NOT SUBMIT THEM WITH THE PROPOSAL.)**

- King County Personnel Inventory Report
- Affidavit and Certificate of Compliance with King County Code 12.16
- Statement of Compliance - Union or Employee Referral Agency Statement
- Final Affidavit of Amounts Paid
- King County Code 3.04.120 and Consultant Disclosure Form
- 504/ADA Disability Assurance of Compliance and Corrective Action Plan

The proposer shall initial here that he/she has reviewed these forms and in the event of being selected as the contractor shall comply with these requirements.

Initialed: *[Signature]*

In addition, the contractor will be required to complete and submit a King County Insurance form or provide an approved equivalent.

Copies of these forms are available through King County Department of Finance, Procurement and Contract Services Division calling (206) 296-4210.

KING COUNTY CONSULTANT DISCLOSURE FORM



King County
Board of Ethics

Pursuant to 3.04.120, this form is to be completed by private consultant firms or individuals entering into contracts with King County to perform studies costing in excess of \$2500. **IMPORTANT NOTE: No payment shall be made on any contract with any private consultant firm and/or individual until five days after receipt of this form by the Board of Ethics, 900 Fourth Avenue, Bank of America Building, Suite 860, Seattle, WA 98104, MS-BOC 0860; (206) 296-1586; FAX (206) 205-0725. Both consultant and contracting department are responsible for ensuring compliance with this requirement.**

LEASE TYPE OR PRINT ALL INFORMATION

Today's date: 6/15/99
Consultant's Name: Ernest S. Ting and Associates Amount of Contract: \$96,000
Address: 3800 Monterey Blvd., Oakland CA 94619 Duration: approx 4 mos.
Contracting King County Dept. AND Div: County Council
Type of Services Contracted: Telecommunications + Technology Consultant

List the name of any office or directorship in the firm presently held by former King County employees whose employment with the County terminated within the past two years:

Name: N/A Office/Directorship: _____
Former County Department: _____ Date Terminated: _____

List any office or directorship in the firm held by any current King County employee:

Name: N/A Office/Directorship: _____
County Department: _____
Name: _____ Office/Directorship: _____
County Department: _____

List name of current King County employee's spouse or immediate family member holding an office or directorship in the firm:

Name: N/A Office/Directorship: _____
Name of County Employee: _____ County Department: _____
Relationship to Employee (spouse, sister, brother, etc.): _____
Name: _____ Office/Directorship: _____
Name of County Employee: _____ County Department: _____
Relationship to Employee (spouse, sister, brother, etc.): _____

4. Indicate level of financial interest in the firm by King County employee, his/her spouse or immediate family members:

Name: N/A Office/Directorship: _____
Percentage of Stock (if more than 5%): _____ Salary: _____
Other form of interest in firm (please specify): _____

5. Indicate whether an officer or director in the firm (whether salaried or unsalaried) is a member of a King County board or commission:

Name: N/A Office/Directorship: _____
County Board or Commission: _____
Name: _____ Office/Directorship: _____
County Board or Commission: _____

6. List all other contracts you or your firm have had with King County during the past five years, including the amount of the contract. Attach a separate sheet if necessary.

Type of work or service provided: N/A
Contract Amount(s): _____
Duration of Contract(s): _____
Contracting Department AND Division: _____

7. Are there any potential conflicts of interest that need to be disclosed? If so, please explain:

No.

...continue on an additional sheet if necessary.

ATTESTATION:

I, Ernest S. Ting, certify under penalty of perjury
(print name)
that this statement is true, accurate, and complete.

(Signature) [Signature] Principal
(Title)

Signed this 15th day of June, 19 99.

Exhibit E



PERSONNEL INVENTORY REPORT

10716

Legal name of business Ernest S. Ting Telephone No: (510) 530-3388
 dba (if applicable) and Associates

Street address 3000 Monterey Blvd City Oakland State CA Zip Code 94619

Submitted by: Ernest S. Ting Title: Principal Date: 6/15/99

IRS Employer Identification Number: 138-44-1414

Do you have any employees? No Yes

If yes, list on the Employment Data Chart below the total number of employees for all businesses located in (1) King County. If none, list the total number of employees for all businesses located in (2) Washington State. If none, list the total number of employees for all businesses located in the (3) United States. Indicate which locale (1,2,3) report covers _____. This report covers Business Location(s) in (circle one): [King County, Washington State, Other States] for the Payroll Period ending (Month/Day/Year): _____.

Do any of your employees belong to a union and/or do you use an employee referral agency? No Yes

If yes, list the unions and/or employee referral agencies with whom you have agreements: _____

If you expect to do more than \$10,000 worth of public work (construction) or, more than \$25,000 worth of business with King County, the unions or employee referral agencies must submit a statement of compliance with King County Code Chapter 12.16.

Job Categories	Whites		African Americans		Asians		Native Americans		Hispanics		Disabled		Minority Subtotal		Disabled Subtotal	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Managerial																
Professional																
Technical																
Clerical																
Sales																
Service																
Labor																
On-Job																
Apprentice																
Skilled Craft*																
Subtotal																

* Journey worker: List by classification on reverse, e.g., carpenter, plumber, etc.

Total number of employees reported above: 0 If no employees, write "0."

10716

SUPPLEMENTAL FORM

Use this form as necessary to report the total work force.

Legal Name of Business _____ Telephone _____

Submitted by: _____ Title _____ Date _____

Job Categories	Whites		African Americans		Asians		Native Americans		Hispanics		Disabled		Minority Subtotal		Disabled Subtotal	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Managerial																
Professional																
Technical																
Clerical																
Sales																
Service																
Labor																
On-Job Trainees																
Apprentice																
Skilled Craft*																
Subtotal																

Contact the King County Procurement Services Division at (206) 296-4210 or the King County M/WBE and Contract Compliance Division (206) 684-1330 if you have any questions concerning completion of this form.



Exhibit F

10716

AFFIDAVIT AND CERTIFICATE OF COMPLIANCE

With King County Code Chapter 12.16, Discrimination and Affirmative Action in Employment by Contractors, Subcontractors and Vendors

The undersigned, being first duly sworn, on oath states, s/he is authorized by the Contractor, and on the Contractor's behalf, affirms and certifies as follows:

Definition: "Contractor" shall mean any contractor, vendor or consultant who supplies goods and/or services. "Contract" shall mean any contract, purchase order or agreement with King County Government, hereinafter called the County.

A. Contractor recognizes that discrimination in employment is prohibited by federal, state and local laws. Contractor recognizes that in addition to refraining from discrimination, affirmative action is required to provide equal employment opportunity. Contractor further recognizes that this affidavit establishes minimum requirements for affirmative action and fair employment practices and implements the basic nondiscrimination provisions of the general contract specifications as applied to service, consultant and Contractor contracts exceeding \$25,000, or public work contracts exceeding \$10,000. Contractor herein agrees that this affidavit is incorporated as an addendum to its general contract, and recognizes that failure to comply with these requirements may constitute grounds for application of sanctions as set forth in the general specifications. King County Code Chapter 12.16 and this affidavit, PROVIDED FURTHER, that in lieu of the affidavit, the Executive may accept a statement pledging adherence to an existing contractor affirmative action plan where the provisions of the plan are found by the Executive to substantially fulfill the requirements of this chapter.

B. Contractor shall give notice to their supervisors and employees of the requirements for affirmative action to be undertaken prior to the commencement of work.

C. This person has been designated to represent the Contractor and to be responsible for securing compliance with and for reporting on the affirmative actions taken.

AUTHORIZED AFFIRMATIVE ACTION REPRESENTATIVE

NAME: Ernest S. Ting

D. Contractor will cooperate fully with the M/WBE and Contract Compliance Division and appropriate County agents while making every reasonable "good faith" effort to comply with the affirmative action and nondiscrimination requirements set forth in this sworn statement and in King County Code Chapter 12.16.

E. Reports. The Contractor agrees to complete and submit with this affidavit such additional reports and records that may be necessary to determine compliance with the affidavit and to confer with the MWBE and Contract Compliance Division staff at such times as the County shall deem necessary. The information required by this chapter includes but is not limited to the following reports and records:

1. Personnel Inventory Report: This report shall include a breakdown of the employer's workforce showing race, gender, and disability status.
2. Monthly Utilization Report: This report shall apply to construction contractors and subcontractors and shall provide the number of hours of employment for minority, women and disabled employees by craft and category.
3. Self-assessment and Test Validation: Review of all employment policies and procedures, including tests, recruitment, hiring and training practices and policies, performance evaluations, seniority policies and practices, job classifications and job assignments to assure that they do not discriminate

3. Statement from Union or Worker Referral Agency: This statement affirms that the signee's organization has no practices and policies which discriminate on the basis of race, color, creed, religion, sex, age, marital status, sexual orientation, nationality or the presence of any sensory, mental or physical disability.

The information required in this section shall be submitted on forms provided by the County unless otherwise specified.

F. Subcontractors: For public work projects and contracts over \$10,000, the prime contractor shall be required to submit to the County, along with its qualifying documents under the Chapter, employment profiles, Affidavits and Certificates of Compliance Reports and Union Statements from its subcontractors in the same manner as these are required of the prime contractor. Reporting requirements of the prime contractor during the contract period will apply equally to all subcontractors.

G. Employment Goals for Minorities, Women and Persons with Disabilities: No specific levels of utilization of minorities and women in the workforce of the Contractor shall be required, and the Contractor is not required to grant any preferential treatment on the basis of race, sex, color, ethnicity or national origin in its employment practices. Notwithstanding the foregoing, any affirmative action requirements set forth in any federal regulations, statutes or rules included or referenced in the contract documents shall continue to apply.

H. Affirmative Action Measures: Contractor agrees to implement and/or maintain reasonable good faith efforts to comply with King County Code Chapter 12.16. The evaluation of a contractor's compliance with the Chapter shall be based upon the contractor's effort to achieve maximum results from its affirmative action measures. The Contractor shall document these efforts and shall implement affirmative action steps at least as extensive as the following:

1. Policy Dissemination: Internal and external dissemination of the contractor's equal employment opportunity policy; posting of nondiscrimination policies and of the requirements of this Chapter on bulletin boards clearly visible to all employees; notification to each subcontractor, labor union representative of workers with which there is a collective bargaining agreement or other contract, subcontract, or understanding of the contractor's commitments under the Chapter. Inclusion of the equal opportunity policy in advertising in the news media and elsewhere.
2. Recruiting: Adoption and implementation of recruitment procedures designed to increase the representation of women, minorities and persons with disabilities in the pool of applicants for employment, including, but not limited to establishing and maintaining a current list of minority, women and disabled recruitment sources, providing these sources written notification of employment opportunities and advertising vacant positions in newspapers and periodicals which have minority, female and/or disabled readership.
1. During the performance of the Contract, neither the Contractor nor any party subcontracting under the authority of the Contract shall discriminate nor tolerate harassment on the basis of race, color, sex, religion, nationality, creed, marital status, sexual orientation, age, or the

against, or have a discriminatory impact on, minorities, women and persons with disabilities and validate all tests and other selection requirements where there is an obligation to do so under state or federal law.

4. Record of Referrals: Maintain a current file of applications of each minority, women and persons with disabilities who are applicants or referrals for employment indicating what action was taken with respect to each such individual and the reasons therefor. Contact these people when an opening exists for which they may be qualified. Names may be removed from the file after twelve months have elapsed from their last application or referral.

5. Notice to Unions: Provide notice to labor unions of the contractor's nondiscrimination and affirmative action obligations pursuant to King County Code Chapter 12.16. Contractors shall also notify the M/WBE and Contract Compliance Division if labor unions fail to comply with the nondiscrimination or affirmative provisions.

6. Supervisors: Ensure that all supervisory personnel understand and are directed to adhere to and implement the nondiscrimination and affirmative action obligations of the contractor under King County Code Chapter 12.16. Such direction shall include, but not be limited to, adherence to, and achievement of, affirmative action policies in performance appraisals of supervisory personnel.

7. Employee Training: When reasonable, develop on-the-job training opportunities which expressly include minorities, women, and persons with disabilities and sponsor and/or utilize, training/educational opportunities for the advancement of women, minorities, and person with disabilities employed by the contractor, subject to acceptance by the County.

8. Responsible Person: Designate an employee who shall have the responsibility for implementation of the Contractor's affirmative action measures.

9. Progress Reporting: Prepare as part of the affirmative action plan an analysis and report on the progress made toward eliminating the underrepresentation of women, minorities and persons with disabilities in the contractor's workforce on an annual basis.

presence of any sensory, mental or physical disability in the employment or application for employment or in the administration or delivery of services or any other benefits under this Contract.

J. Contractor agrees to provide reasonable access upon request to the premises of all places of business and employment, relative to work undertaken in this Contract, and to records, files, information and employees in connection therewith, to the M/WBE and Contract Compliance Division or agent for purposes of reviewing compliance with the provisions of this Affidavit and agrees to cooperate in any compliance review.

K. Should the M/WBE and Contract Compliance Division find, upon complaint, investigation or review, the Contractor not be in good faith compliance with the provisions contained in this Affidavit, it shall notify the County and Contractor in writing of the finding fully describing the basis of noncompliance. Contractor may request withdrawal of such notice of noncompliance at such time as the compliance office has notified in writing the Contractor and the County that the noncompliance has been resolved.

L. The contractor agrees that any violation of any term of this Affidavit, including reporting requirements, shall be deemed a violation of King County Code Chapter 12.16. Any such violation shall be further deemed a breach of a material provision of the contract between the County and the Contractor. Such breach shall be grounds for implementation of any sanctions provided for in this chapter, including but not limited to, cancellation, termination or suspension, in whole or in part, of the Contractor by the County; liquidated damages; or disqualification of the contractor PROVIDED, that the implementation of any sanctions is subject to the notice and hearing provisions of King County Code Chapter 12.16.110.

CONTRACTOR: Ernest S. Ting and Associates 3800 Monterey Blvd.
Company Name Address City State Zip Oakland CA 94619

I have read and understood the foregoing; and am authorized on behalf of the Contractor to agree to the terms and conditions of this and Affidavit and Certificate of Compliance and therefore, execute the same.

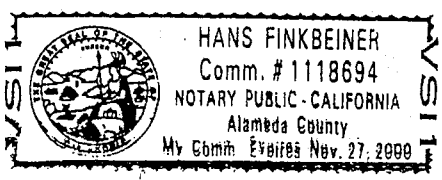
Authorized Signer: Ernest S. Ting Principal (510) 530-3588
Type or Print Title Phone Signature

VALID ONLY IF NOTARIZED

SUBSCRIBED AND SWORN TO BEFORE ME THIS 15TH DAY OF JUNE 19 99

Hans Finkbeiner

Notary Public in and for the State of CALIFORNIA
residing at OAKLAND, CA 94617



10716

504/ADA DISABILITY ASSURANCE OF COMPLIANCE

Complying with Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans With Disabilities Act of 1990, two federal laws which prohibit discrimination against qualified people with disabilities.

I understand that federal and state laws prohibit discrimination in public accommodation and employment based solely on disability. In addition, I recognize that Section 504 requires recipients of federal funds (either directly or through contracting with a governmental entity receiving federal funds) to make their programs, services, and activities, when viewed in their entirety, accessible to qualified and/or eligible people with disabilities. I agree to comply with, and to require that all subcontractors comply with, the 504/ADA requirements. I understand that reasonable accommodation is required in both program services and employment, except where to do so would cause an undue hardship or burden.

I agree to cooperate in any compliance review and to provide reasonable access to the premises of all places of business and employment and to records, files, information, and employees therein to King County for reviewing compliance with Section 504 and ADA requirements.

I agree that any violation of the specific provisions and terms of the 504/ADA Disability Assurance of Compliance and/or Corrective Action Plan required herein and Section 504 and the ADA, shall be deemed a breach of a material provision of the Contract between the County and the Contractor. Such a breach shall be grounds for cancellation, termination, or suspension, in whole or in part, of this Contract by the County.

According to the responses to the questions in the 504/ADA Self-Evaluation Questionnaire, (company name) Ernest J. Tibbald Associs in compliance with 504/ADA.

YES

NO

If the above response is no, the following corrective actions will be taken:

Corrective Action Plan

The following Corrective Action Plan is submitted to comply with Section 504 and ADA requirements.

General Requirements

Actions To Be Taken	Completion Date

504/ADA DISABILITY ASSURANCE OF COMPLIANCE (cont'd.)

Program Access

Actions To Be Taken

Completion Date

Employment and Reasonable Accommodation

Actions To Be Taken

Completion Date

Physical Accessibility

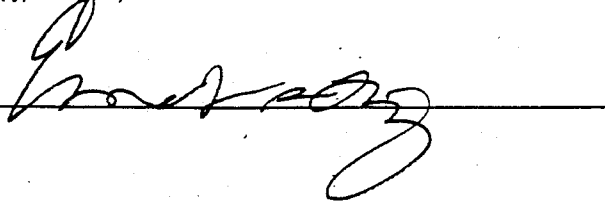
Actions To Be Taken

Completion Date

I Declare Under Penalty of Perjury under the Laws of the State of Washington that the Foregoing is True and Correct.

Contractor: Ernest S. Ting and Associates
3000 Monterey Blvd. Oakland CA 94619
Company Name Street Address City State Zip

Authorized Signer: Ernest S. Ting Phone (510) 530-3588
Name (type or print) Title

Signature: 

10716



Ernest S. Ting and Associates
Management and Economic Counsel

510/530-3588 Fax: 510/530-2012

June 15, 1999

Ms. Rebecha Cusack
Budget and Fiscal Management Committee
King County Council
516 Third Avenue, Room 1200
Seattle, WA 98104-3272

Dear Ms. Cusack:

I would like to request a waiver of the insurance requirements outlined in the Council's Telecommunications and Technology Consultant contract (RFP No. 122-99KJF) with Ernest S. Ting and Associates.

As an independent contractor in the business of facilitation and management/economic consulting, I have not previously been required to obtain general liability coverage for my practice. However, in an effort to comply with the insurance requirements contained in the current County contract, I have contacted other independent contractors in both the facilitation and management/economic consulting businesses to locate a suitable carrier. I have found that none of the other consulting practices have been required to obtain commercial insurance coverage for either government or private clients. In the instances where a public agency had a standard insurance requirement, such requirements were waived.

I have been informed by Mr. Keith Mitchell, deputy risk manager for the County, that under these circumstances he will entertain a request to waive the insurance requirements contained in the County contract for a Telecommunications and Technology Consultant. If it meets with your approval, I would ask that you transmit such a request to Mr. Mitchell.

As always, please give me a call if you have any questions or concerns.

Best regards,

Ernest S. Ting
ERNEST S. TING AND ASSOCIATES

Waiver Approved
Ernest S. Ting
Risk Management
6/16/99

cc: Elissa Benson

107167

Exhibit I
General Provisions
COMPENSATION AND METHOD OF PAYMENT

The county will pay a flat amount of \$96,000 for the scope of services to be payable in accordance with the following schedule based on provision of the following deliverables:

Phase I: Initial Planning and Commencement of Panel Deliverable: Expert Review Panel Workplan, Summary of Issues, and Meeting Schedule as approved by the Panel and Lead Staff of the Budget and Fiscal Management Committee.	\$15,000
Phase II: Management and Facilitation of Panel Deliberations and associated analysis	
Deliverable A: Monthly Status Report for July	\$18,000
Deliverable B: Monthly Status Report for August	\$18,000
Phase III: Compilation of Draft Report Deliverable: Draft Panel Report	\$20,000
Phase IV: Preparation of Final Panel Report	
Deliverables: Final Panel Report	\$20,000
Presentation of Report to Council	\$5,000

The work of the consultant and expert review panel is expected to conclude in early October unless the Panel recommends that a different due date is necessary and that recommendation is approved by the budget and fiscal management committee.

The total contract amount of \$96,000 is based upon the scope of services and work identified in Exhibit A being completed within approximately three and half months or by October 8, 1999. All expenses for mailings to panelists, the BFM Committee Chair and Lead Staff; consultant travel; clerical and administrative support, and conference calling between the consultant and the lead staff will be covered by the contract consultant. If the Expert Review Panel recommends that a significantly longer period of a time is necessary to complete the work of the panel and the budget and fiscal management committee approves an extension for submission of the report, additional payment for services beyond the original amount and/or an adjustment to the schedule of deliverables and payments for Phase II may be negotiated.