



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

October 1, 2002

Ordinance 14487

Proposed No. 2002-0339.2

Sponsors Gossett

1 AN ORDINANCE relating to Institutional Network (I-Net)
2 operations; and amending the 2002 Budget Ordinance,
3 Ordinance 14265, Section 95, as amended.
4
5

6 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

7 SECTION 1. Ordinance 14265, Section 95, as amended, is hereby amended by
8 deleting the following proviso:

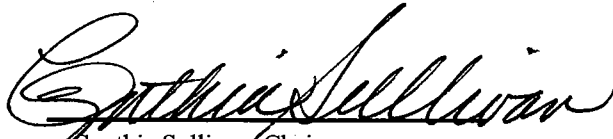
9 \$744,750 shall be spent only on I-Net operations for the first three quarters of
10 2002, through September 30, 2002.

11

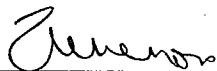
Ordinance 14487 was introduced on 8/19/2002 and passed by the Metropolitan King
County Council on 9/30/2002, by the following vote:

Yes: 10 - Ms. Sullivan, Ms. Edmonds, Mr. von Reichbauer, Mr. Phillips, Mr.
McKenna, Mr. Constantine, Mr. Pullen, Mr. Gossett, Ms. Hague and Mr.
Irons
No: 0
Excused: 3 - Ms. Lambert, Mr. Pelz and Ms. Patterson

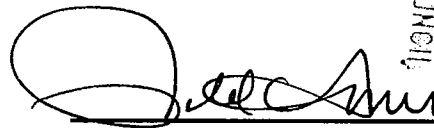
KING COUNTY COUNCIL
KING COUNTY, WASHINGTON


Cynthia Sullivan, Chair

ATTEST:


Anne Noris, Clerk of the Council

APPROVED this 15 day of October, 2002.


Ron Sims, County Executive

RECEIVED
2002 OCT 11 AM 11:24
CLERK
KING COUNTY COUNCIL

Attachments A. Second Quarter 2002 I-Net Financial Status Report July, 2002

14487

ATTACHMENT

A

2002-339

Second Quarter 2002
I-Net Financial Status Report

July, 2002

Department of Executive Services
Information and Telecommunications
Services Division

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Attachments:

1. Allotment variance for I-Net Operations – Second Quarter 2002
2. I-Net Financial Plan – Second Quarter 2002
3. Customer Testimonial

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I. Purpose

This report has been prepared to respond to a proviso in the 2002 Adopted Budget appropriation for ITS – I-Net Operations which stated;

“PROVIDED FURTHER THAT:

The executive shall submit to the council twenty-five days following the close of a quarter reports on I-Net revenues and expenditures, including an identification of revenue by source. The executive is requested to transmit with the second quarter report a supplemental appropriation request for fourth quarter I-Net operating funds. The quarterly reports must be filed with the council clerk . . .”

In April, 2002, ITS provided the first I-Net quarterly status report. Subsequent reports are intended to build from the initial baseline report. Therefore some of the background information regarding the I-Net contained in the first report will not be duplicated here.

All of the quarterly status reports will:

1. Provide budget status and financial plan summaries;
2. Summarize significant factors affecting revenues and expenses;
3. Provide a report showing the impact of marketing efforts on contracts;
4. Present an updated projection for 2002;
5. Provide operational metrics to help assess I-Net performance;
6. Provide other relevant information.

II. Executive Summary

As of the end of June 2002, I-Net has been operational for a full year. The following table summarizes actual full-service customers and dark fiber sites versus forecasts provided for the Gartner review.

**Table 1
I-Net Full-Service Customer Sites and Active Dark Fiber Sites**

| | First Quarter 2002 | Second Quarter 2002 |
|---|--------------------|---------------------|
| Full-service customer sites | 83 | 94 |
| Full-service customer sites projected * | 96 | 96 |
| Agencies served | 5 | 7 |
| Active dark fiber sites | 0 | 21 |
| Active dark fiber sites projected * | 37 | 37 |
| Agencies served | 0 | 1 |

* ITS I-Net Operations Forecast, March, 2001

Summary of Financial Performance

One of the county's primary goals for I-Net is to operate without benefit of direct CX subsidy. I-Net financial performance for operations is summarized in the table below and demonstrates that this goal has been met for the first year of operations.

**Table 2
I-Net Financial Performance**

**First Quarter 2002
(January 1 through March 31, 2002)**

| | Projected | Actual | Difference |
|---------|------------|-----------|------------|
| Revenue | \$234,658 | \$174,650 | (\$60,008) |
| Expense | \$242,932 | \$153,681 | (\$89,251) |
| Net | (\$ 8,274) | \$20,969 | \$29,243 |

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Second Quarter 2002
(April 1 through June 30, 2002)

| | Projected | Actual | Difference |
|---------|-----------|------------|------------|
| Revenue | \$246,142 | \$208,000 | (\$38,142) |
| Expense | \$242,932 | \$213,897 | (\$29,035) |
| Net | \$ 3,210 | (\$ 5,897) | (\$ 9,107) |

Note: The above projected and actual numbers are based on ITS financial tracking system, which is more up-to-date than the ARMS reports on which the Quarterly Allotment Variance reports are based (see Attachment 1 to this Report.)

Life-to-Date
(July 1, 2001 through June 30, 2002)

| | Projected | Actual | Difference |
|---------|-----------|-----------|-------------|
| Revenue | \$852,800 | \$675,000 | (\$177,800) |
| Expense | \$778,040 | \$575,616 | (\$202,424) |
| Net | \$ 74,760 | \$99,384 | \$ 24,624 |

Notes on Significant Factors Affecting Life-to-Date Financial Performance

Revenue

- A delay in contract negotiations for dark fiber service for one of the two major school districts,
- Delayed sign up for cities and content providers, and
- Site completions for several eastside sites.

Expense

- The delay in the City of Seattle's negotiations on the new Internet Services Provider (ISP) contract also reduced expense by \$50,000 from the forecast.
- Integration of KC WAN and I-Net Operations staff resulted in a savings of approximately \$10,000.
- Expenses for equipment maintenance (\$74,000) are projected for 4th quarter expenditure; fiber and ancillary equipment maintenance (\$16,000) did not occur, but are expected in 3rd or 4th quarter; other technical tools (\$5,000) and staff training (7,000) will be delayed until the third or fourth quarter.
- The remaining \$40,000 represents unbilled ITS Central overhead and miscellaneous overhead savings (\$13,000).

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III. Revenue and Expense Summary and Financial Plan (as of June 30, 2002)

ITS has prepared a 2002 YTD Revenue and Expenditure Status report and Financial Plan as part of its quarterly budget status reporting to Council. These are included as Attachment 1 and Attachment 2, respectively.

IV. Customer Contracts

Table 3 summarizes the status of efforts to secure contracts with I-Net customers.

Table 3
I-NET Customer Contracts

| | Contracts in place | Negotiated Contracts Pending Signature | Contracts in Negotiation |
|-----------------|--------------------|--|--------------------------|
| Total Contracts | 10 | 0 | 15 |

ITS evaluated the revenue impacts of the timing of these contracts and found that:

1. 98% of 2002 projected revenue is secured with an existing or pending contract, and
2. 84% of 2003 projected revenue is secured with an existing or pending contract.

V. Pipeline Report

There is often a significant lag between when an agency expresses interest in becoming an I-Net customer and when ITS initiates service and begins billing. To provide context to these financial projections, ITS developed this "pipeline" report to track progress in getting agencies enrolled. For each agency, ITS has identified the originally assumed enrollment year by the status of contract efforts with that agency.

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Table 4
I-NET Second Quarter 2002 Pipeline Report
Activated Sites

| | Q3 2001/ Q1 2002 | Q2 2002 | Q3 - Q4 2002 Projected | 2003 Projected |
|--|---------------------|-----------|------------------------------|-------------------|
| Contracts in Place | | | | |
| King County WAN | 41 | 2 | 6 | 2 |
| King County Library System | 38 | 1 | 1 | 1 |
| Kent School District | | 27 | 3 | 1 |
| Northshore School District | | | 7 | |
| Tahoma School District | | | 6 | |
| City of Snoqualmie | 1 | | | |
| City of Woodinville | 1 | | | |
| City of Issaquah | | 1 | | |
| Valley Communications | | | 1 | |
| Seattle Public Utilities | 2 | 1 | | |
| Contracts Negotiated, Pending Signature | | | | |
| | | | | |
| Contracts in Negotiation | | | | |
| City of Lake Forest Park | | | 1 | |
| City of Renton | | | 1 | |
| Children's Hospital and Medical Ctr | | | 2 | |
| City of Shoreline | | | 2 | |
| City of Bothell | | | 1 | |
| Woodland Park Zoo | | | 1 | |
| Federal Way School District | | | | 8 |
| Lake Washington School District | | | | 8 |
| Bellevue Community College | | | | 1 |
| City of Tukwila | | | 1 | |
| City of Federal Way | | | | 1 |
| Seattle Art Museum | | | 1 | |
| City of SeaTac | | | 1 | |
| Seattle Community College | | | | 1 |
| Woodinville Fire & Life Safety | | | 1 | |
| Totals | 83 | 32 | 36 | 23 |

VI. An Updated Projection for 2002

ITS used the information on status of customer contracts to prepare an update of I-Net financial projections for 2002. As the year unfolds, ITS will report changes in both revenue and expenditure projections

**Table 5
Projected I-Net Financial Performance**

| Revenue | 2002 Adopted* | 2nd Quarter 2002 Estimated | Variance |
|-----------------------|---------------------|-------------------------------|--------------------|
| King County Agencies | \$ 340,900 | \$363,300 | \$ 22,400 |
| King County Library | 357,000 | 345,000 | (12,000) |
| External Users | 214,500 | 111,000 | (103,500) |
| Dark Fiber Users | 140,400 | 66,000 | (74,400) |
| Miscellaneous | 6,409 | 65,126 | 58,717 |
| Totals | \$ 1,059,209 | \$950,426 | (\$108,783) |
| Expense | | | |
| Labor | \$ 457,931 | \$ 414,991 | (\$ 42,940) |
| Overhead | 183,190 | \$ 175,048 | (8,142) |
| Infrastructure | 352,143 | \$ 305,925 | (46,218) |
| Totals | \$ 993,264 | \$895,964 | (\$ 97,300) |
| Net Gain(Loss) | \$ 65,945 | \$ 54,462 | (\$ 11,483) |

*2002 Adopted includes 4th quarter expenditure held by council proviso as originally requested by ITS during the 2002 budget process. The revised 4th Quarter, 2002 amount now being requested is lower and is consistent with current projections.

Notes on Variances:

Revenue: External User variance is due to changes in activation dates for suburban cities, school district administration sites, and content providers. The delay in the activation date for the Kent (to 2nd Qtr), Northshore (to 3rd Qtr), and Tahoma (to 4th Qtr) School Districts was the major factor in lower dark fiber revenue. These were offset by a gain in Miscellaneous Revenue, from provisioning fees and higher interest.

Expense: Savings in labor costs of \$43,000 are due to integration and leveraging of KC WAN and I-Net Ops staff (as supported by the Gartner Report). Infrastructure cost savings include "out of band" (dial-up) costs of \$7,000, Internet connection costs of \$25,000, and maintenance/repair costs of \$14,000. Overhead decreases (\$8,000) are for FTE-based costs.

VII. Operational Metrics

While the focus of this proviso is on I-Net's financial performance, it is useful to briefly look at operational metrics as well. The reliability and quality of service provided by I-Net is one of the keys to its long-term viability. Without a reliable network, current customers will leave and marketing efforts erode.

- I-Net edge/core uptime metric was 99.99% for the period 4/1/02 - 6/30/02. This is uptime from the customers' perspective. Service level agreements call for 99.9% availability. The redundant nature of I-Net helps ensure reliability.
- During the second quarter of 2002, I-Net experienced a total of 14 unplanned outages. Of the 83 customer sites, only 21 experienced any unplanned outages once in production.
- 55% of the customer outages were less than 5 minutes in duration.

These were the leading causes of unplanned outages:

- AT&T fiber events. On two occasions outages resulted from problems with existing fibers. Only one event resulted in a customer outage, which was restored with spare fibers within the two hour initial response window. The other event, when a truck severely damaged three core I-Net links (and much of the ATT cable network), had no customer impact as all circuits were rerouted automatically.
- Long power outages. When power to a facility is off for an extended period of time, available battery power will not suffice. Additional battery capacity is being arranged for that site.
- We experienced one significant outage with the I-Net Network Access Point router. A second, alternative, router is being prepared to provide redundant functionality in the future.

VIII. Related Work Underway

In last summer's survey of potential I-Net customers, roughly one-third of potential customers surveyed expressed limited interest in enrollment. For this group, I-Net's cost was noted as a limiting factor 57% of the time. The present bundled service model works well for agencies that require I-Net's full capabilities, but is less attractive to consumers with less demanding requirements. Changing the mix of services and hardware will require careful analysis and consideration. As the consultants noted, additional services can make billing and support services more complex (thereby adding to I-Net costs) and potentially cause some current full-service customers to move to a less-expensive tier.

ITS has created an unbundled approach to I-Net services that provides several connectivity options. These options will allow potential I-Net users the ability to select reliable high-speed connectivity at prices comparable with private industry, while maintaining the competitive rate offered in the current bundled model. ITS's approach will be implemented in phases.

- Phase I: Identify the unbundling options. *This phase has been complete.*
- Phase II: Consult with Gartner to ensure that the unbundling options created will meet potential I-Net customers' objectives and that our approach is consistent with industry direction. *ITS intends to complete this review in August.*
- Phase III: Obtain feedback from potential customers and evaluate the findings. This phase would also be facilitated by Gartner and is likely to involve either a customer survey or, potentially, focus groups to help us select the optimum strategy and understand any other inhibitors to enrollment. *ITS anticipates that this review will be concluded in September.*
- Phase IV: Once the findings have been analyzed, ITS will finalize an unbundled offer that will support the organization staff and financial model. ITS will develop final recommendations based on the survey results, financial projections, and our ability to execute new service offerings cost effectively. *ITS anticipates that this work will conclude in November, 2002.*

ITS also is completing an assessment of the County's thousands of individual voice and Frame Relay circuits currently providing connectivity for our telephone and data services. The telephone systems are supported by a number of interconnected PBX systems as well as Centrex service from QWEST, and provide telephone service to approximately 200 separate locations throughout the county. The Frame Relay data circuits are used in support of the KCWAN transport network. Wherever possible, ITS will consolidate circuits onto I-Net fiber or higher-capacity leased circuits so that the County's overall cost of interconnection and Frame Relay services declines. This is consistent with the Gartner recommendations and the successful experiences of the King County Library District.

IX. Community of Interest Meeting

The second I-Net Community of Interest meeting was held on July 17th. At our first meeting, a number of the attendees expressed interest in I-Net's video conferencing capabilities so the July meeting was held in two locations (Key Tower and Issaquah) linked together through I-Net's video conferencing capabilities.

Jed Moffitt, Associate Director for Information Technology at the King County Library System was one of the featured speakers, sharing the Library's experience from the perspective of one of our major I-Net customers. A copy of a recent testimonial from Mr. Moffitt is included as Attachment III to this report.

X. Conclusions

King County continues to make good progress in getting I-Net operations ramped up. Operational performance has been somewhat better than expected. We have been able to activate built sites without any significant delays. We continue to monitor

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expenses and revenues very closely. While net financial status for operations is better than projected last summer, effective marketing efforts and customer support services are still required to bring I-Net revenue in line with original operations forecast.

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**ALLOTMENT VARIANCE FOR
I-NET Operations
Fund4531/Appro 0490**

| | Second Quarter | | | | Total |
|------------------------------|----------------|----------------|----------------|----------|----------------|
| | 1 | 2 | 3 | 4 | |
| Per Allotment Plan | 248,250 | 248,250 | 248,250 | 0 | 744,750 |
| Automated Carryover | 0 | | | | 0 |
| First Quarter Omnibus | | | | | 0 |
| Second Quarter Omnibus | | | | | 0 |
| Third Quarter Omnibus | | | | | 0 |
| Fourth Quarter Omnibus | | | | | 0 |
| Other Supplemental Ordinance | | | | | 0 |
| #N/A | 0 | 0 | 0 | 0 | 0 |
| | | | | | 0 |
| | | | | | 0 |
| TOTAL ALLOTMENT: | 248,250 | 248,250 | 248,250 | 0 | 744,750 |

| Calculation of Variance | 1st | 2nd | 3rd | 4th | Total |
|------------------------------|----------|-----------|---------|---------|---------|
| (a) Cum. Quarterly Allotment | 248,250 | 496,500 | 744,750 | 744,750 | 744,750 |
| (b) Cum. Quarterly Actual | 227,151 | 310,515 | #N/A | #N/A | #N/A |
| (c) Difference (b-a) | (21,099) | (185,985) | #N/A | #N/A | |
| (d) Variance (c/a) | -8.50% | -37.46% | #N/A | #N/A | |

Footnotes to Variance* Over/(Under)

3. Reported expenditures do not include encumbrances.

6. Various payments and transfers will not be made until the next quarter.

#N/A

#N/A

#N/A

Finance Manager's Verification Helen A. Harris
Type Finance Manager's Name

July 18, 2002
Date

*Required for variances over or under 5%.

Attachment 2

**Form C
Non-CX Financial Plan**

Fund Name: I-NET Operations
Fund Number: 000004531/0490
Prepared by: Christine Chou

Quarter: Second 2002 (Preliminary)
Date Prepared: 07/08/02

| Category | 2001 Actual ¹ | 2002 Adopted | 2002 Estimated | Estimated-Adopted Change | Explanation of Change |
|--|--------------------------|------------------|------------------|--------------------------|--|
| Beginning Fund Balance | | 90,634 | 82,528 | | |
| Revenues | | | | | |
| Operating Revenues | 292,358 | 1,059,209 | 950,426 | (108,783) | Delay in contract negotiation with major school districts adversely affected Q1 and Q2 revenues. Revenue loss mitigated by reduced expenditures. |
| Total Revenues | 292,358 | 1,059,209 | 950,426 | (108,783) | |
| Expenditures | | | | | |
| Operating Expenditures | (209,830) | (744,750) | (744,750) | | The 2002 Adopted Budget included only 9 months of expenditure authority. A supplemental request is submitted with the 2nd quarter report and is consistent with our current projected expenditures for 2002. |
| 2nd Qtr Supplemental | | | (151,214) | (151,214) | |
| Total Expenditures | (209,830) | (744,750) | (895,964) | (151,214) | |
| Estimated Underexpenditures | | | | | |
| Other Fund Transactions | | | | | |
| Total Other Fund Transactions | | | | | |
| Ending Fund Balance | 82,528 | 405,093 | 136,990 | | |
| Designations and Reserves | | | | | |
| Equipment Reserves | (72,037) | (119,342) | (100,000) | | |
| Reserve for 4th quarter Expenditures | (248,514) | (248,514) | | | |
| Total Designations and Reserves | (72,037) | (367,856) | (100,000) | | |
| Ending Undesignated Fund Balance | 10,492 | 37,238 | 36,990 | | |
| Target Fund Balance | 10,492 | 37,238 | 44,798 | | |

Financial Plan Notes:

¹ 2001 actuals were based on the 14th month ARMS report
² Target fund balance equal 5% of operating expenditures

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Attachment 3

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June 26, 2002

John M. Anthony, Asst Manager
Information and Telecommunications Services Divn
King County, Washington
Phone: (206) 296-0607
FAX: (206) 263-4834
e-mail: John.Anthony@metrokc.gov

Dear John:

I thought I'd write with a project status report of the King County Library System I-Net implementation—from a customer perspective as of Summer, 2002:

In short, we're very pleased with the service thus far.

Our long-term goals with I-Net were simple: Increase bandwidth without increasing data communications costs. With 38 out of 42 libraries in the system now connected to I-Net for data, it's safe to say that we've achieved this goal.

The current \$750 per site cost to KCLS represents a comparable cost that we were paying to our previous data communications providers. The difference in bandwidth (and service potential) however is substantial.

Our small Kenmore library previously had a 256k fraction of a T1 service. With I-Net, our bandwidth to all libraries, including Kenmore, is a guaranteed 6MB with peaking and bursting potential to handle even greater traffic if needed.

This bandwidth pad has been very helpful for example, with response time diagnostics.

You know how it is, when a workstation is slow, the culprit can be many things. Before I-Net, network traffic overflow was frequently suspect. Since I-Net, we have had not a single case of network capacity being the cause of workstation response problems. This confidence and network reliability allows us to move swiftly to specific workstation hardware and software issues as we address response related service requests. We no longer have PC people saying it's the network and network people saying it's the PCs (Now it's pretty much always the PCs—or the Internet and its variety of sources—which we are no further along in stabilizing than you are I suppose).

In a year, we've had very few instances of I-Net related downtime. We have lost some of the redundancy insurance available from a commercial carrier, and due to the star configuration of our network, a hit on a central hub can take down five or six libraries. The good news, however, has been that the ATM/Ethernet interface has been very stable, and the support from I-Net service people has always been prompt and competent. In the rare instances that we've had downtime, it hasn't been extended, and your support has been solid.

Our latest endeavor with I-Net has been the ongoing project to re-route our local long-distance telephone services over the I-Net network. This has required some capital equipment and implementation service costs to us (which were anticipated) but we're pleased to report that 5 of

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our largest libraries and our Service Center are now able to place local long-distance calls throughout the county via I-Net lines.

KCLS spends nearly \$300,000 annually on local long-distance charges. We're starting to track comparative monthly costs to see how much of this bill we're able to reduce due to I-Net availability.

In summary, I have to conclude that our experience thus far with I-Net has been an unqualified success. We appreciate your service and support, and we are eager to continue to research new applications that can take advantage of this bandwidth and service for the benefit of King County's 800,000 library patrons.

Regards,

Jed

Jed Moffitt
Associate Director of Information Technology Services
King County Library System
Issaquah, WA 98027
jmoffitt@kcls.org