

**Agency: Commerce, Community and Economic Development****Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Alaska Public Telecommunications, Inc.****Federal Tax ID: 23-7394629****Project Title:****Project Type: Equipment and Materials**

# Alaska Public Telecommunications, Inc. - Mobile Video and Production Upgrade

**State Funding Requested: \$277,000****House District: Anchorage Areawide (11-27)**

One-Time Need

**Brief Project Description:**

|   |
|---|
| Stabilize and upgrade aging video production and monitoring equipment and develop mobile/handheld video delivery. |
|---|

**Funding Plan:**

|                               |                    |
|-------------------------------|--------------------|
| Total Project Cost:           | \$277,000          |
| Funding Already Secured:      | (\$0)              |
| FY2014 State Funding Request: | <u>(\$277,000)</u> |
| Project Deficit:              | \$0                |

**Detailed Project Description and Justification:**

Three of Alaska's four community public television stations -- KTOO in Juneau, KYUK in Bethel and KAKM in Anchorage -- have come together in a service agreement that shares costs for programming, engineering, operations and content production, and is significantly improving the quality of public affairs programming available to Alaskans across the state. KAKM in Anchorage, which has the digital technology and server capacity to provide both statewide and individualized program streams from a single location, is the core of the system which now includes Juneau/Southeast and Bethel/rural Alaska. This proposal, if funded, will stabilize and upgrade aging video equipment and open the door for mobile/handheld video delivery, thus greatly enhancing the delivery of public affairs programming for Alaska residents.

Mobile/handheld video delivery has reached critical mass across the country as smartphones and tablet devices have become ubiquitous. Alaska continues to lag national trends in this area: All major markets nationally now provide this service. But broadband penetration in our state is high and consumers increasingly expect mobile video service. This capability would significantly enhance emergency response communications, thereby reducing exposure and allowing Alaska to take effective action. These enhancements will allow for broad dissemination, in real time, of public safety alerts, such as notices of missing children, thereby increasing the probability of crime prevention.

Automated monitoring systems lower operating costs, improve quality monitoring, provide for swift response to breakdowns, and increase reliability over full-time human oversight. These factors are essential in operating the shared service among three stations and assuring their reliability for viewers. These improvements also provide more effective distribution of emergency response and public safety alerts information during times of need.

Traditionally, broadcast equipment with good care had a life expectancy of 7 to 15 years, particularly for systems such as microphones, lighting and transmitters. But much of our current equipment -- now based on a computer backbone -- is outdated. This is particularly a factor as our video, audio and transmission equipment become more dependent on fast-evolving hardware and software.

This proposal aims to upgrade where needed, anticipate changing technology, and improve service where possible. This request would provide mobile/handheld video for the first time in Alaska and begin the process of modernizing our infrastructure to meet future demands, and will be a major step in increasing the quantity and quality of Alaska-focused public affairs programming available to Alaskans.

|                                       |                  |
|---------------------------------------|------------------|
| Mobile/Handheld Transmitter Upgrade   | \$75,000         |
| Video and Audio Monitoring Equipment  | \$50,000         |
| Production Graphics System            | \$35,000         |
| Rack, Switch and Computer Replacement | \$33,000         |
| TV Synchronization Equipment          | \$30,000         |
| Video Edit Bay Construction           | \$24,000         |
| Wireless Microphone System            | \$20,000         |
| Remote Production Expansion           | \$10,000         |
| <b>Total</b>                          | <b>\$277,000</b> |

### Project Timeline:

Project will be completed during fiscal year 2014.

### Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Alaska Public Telecommunications, Inc.

### Grant Recipient Contact Information:

|               |  |
|---------------|--|
| Name:         | Bernie Washington                                |
| Title:        | Chief Financial Officer                          |
| Address:      | 3877 University Drive<br>Anchorage, Alaska 99508 |
| Phone Number: | (907)550-8421                                    |
| Email:        | bWASHINGTON@alaskapublic.org                     |

Has this project been through a public review process at the local level and is it a community priority?  Yes  No

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: MOBILE HANDHELD EXPANSION

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$82,500.00  
MINIMUM \$67,500.00

Capital \$ \$75,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Install the necessary options to our existing TV transmitter to begin Mobile/Handheld transmission.

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase and install the necessary options to the existing TV transmitter and equipment into the transmission stream that will allow KAKM to become one of the expanding TV stations to transmit to Mobile/Handheld devices for the general public

**Project Justification: (Detail the Why)**

Mobil/Handheld operations are becoming increasingly common in TV transmission throughout the country. PBS is one of the advocates for Mobile/handheld and encourages member stations to participate. The advantages/rewards for broadcasting to M/H devices are the ability to provide another method of delivering data to the general public.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing Advantages: No capital cost  
 Disadvantages: Inability to maintain current "state of the art" capability for a broadcast TV station.

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total    |
|------------------|-------------|--------|--------|--------|--------|----------|
| Cash Expenditure | \$75,000.00 |        | \$0    |        |        | \$75,000 |

**Budget**

| Item               | \$                 | Comments |
|--------------------|--------------------|----------|
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        | \$1,000.00         |          |
| Direct Labor       | \$2,000.00         |          |
| Direct Materials   | \$72,000.00        |          |
| Indirect Labor     | \$0.00             |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$75,000.00</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: TV SYNCHRONIZATION EQUIPMENT AND CHANGEOVER SWITCH

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$33,000.00  
MINIMUM \$27,000.00

Capital \$ \$30,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Purchase and install an additional Sync Generator with a changeover switch

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase a companion sync generator with an auto-changeover switch

**Project Justification: (Detail the Why)**

Since the move to all digital APTI has been operating on a single sync generator; a failure of this vital piece of equipment would be catastrophic. This is the heart of the technical facility and a backup is essential. Nearly all equipment requires a sync generator source for proper operation. Without it there would be no signal. Two sync generators with an auto-change switch is absolutely necessary to insure uninterrupted operation for TV.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing Advantages: No capital cost  
 Disadvantages: Critical failure point would leave APTI TV operations vulnerable

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total       |
|------------------|-------------|--------|--------|--------|--------|-------------|
| Cash Expenditure | \$30,000.00 |        |        |        |        | \$30,000.00 |

| Budget             |                    |          |
|--------------------|--------------------|----------|
| Item               | \$                 | Comments |
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        | \$0.00             |          |
| Direct Labor       | \$0.00             |          |
| Direct Materials   | \$30,000.00        |          |
| Indirect Labor     |                    |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$30,000.00</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name:

**CRITICAL AUDIO MONITORING**

TOTAL PROJECT FUNDING REQUESTED:

|                |             |
|----------------|-------------|
| <i>MAXIMUM</i> | \$16,500.00 |
| <i>MINIMUM</i> | \$13,500.00 |

Capital \$

\$15,000.00

Expense \$

Budgeted:

YES

NO

X

*Management Summary: (Concise description of the project)*

Purchase and install high quality audio monitoring system for TV

*Project Description: (Describe the project the Who, What, Where, and When)*

Engineering will purchase an audio monitoring system that is capable of receiving and qualitative monitoring of the transmitted audio signal to maintain and insure quality standards are being met.

*Project Justification: (Detail the Why)*

There is currently no way to monitor the high quality audio actually transmitted. It is imperative our staff can monitor what is being broadcast both visually and aurally.

*Alternatives with Advantages and Disadvantages:*

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
 Disadvantages: inability to check and maintain signal quality

*Project Risks and Uncertainties: (Obstacles to meeting objectives of project)*

Major obstacle is obtaining funding.

*Expected Cash Flow: (Anticipated spending pattern)*

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total  |
|------------------|-------------|--------|--------|--------|--------|--------|
| Cash Expenditure | \$15,000.00 |        |        |        |        | 15,000 |

**Budget**

| Item               | \$              | Comments |
|--------------------|-----------------|----------|
| Project Mgmt       |                 |          |
| Design             |                 |          |
| Engineering        |                 |          |
| Direct Labor       | \$0.00          |          |
| Direct Materials   | \$15,000.00     |          |
| Indirect Labor     |                 |          |
| Indirect Materials |                 |          |
| Allocations        |                 |          |
| Contingency        |                 |          |
| <b>Total</b>       | <b>\$15,000</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: VIDEO EDIT BAY CONSTRUCTION

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$28,000.00  
MINIMUM \$20,000.00

Capital \$ \$24,000.00 Expense \$

Budgeted: YES  NO X

**Management Summary: (Concise description of the project)**

Design and build a two bay video editing room within the existing facility

**Project Description: (Describe the project the Who, What, Where, and When)**

Quality edit bays will be constructed in an existing unused analog video editing room. The room will be stripped of all existing equipment and two semi isolated editing systems will be installed. The edit system equipment currently exist but needs to be installed where it can be used. There may be some additional support equipment such as monitors and speakers as the systems are built out.

**Project Justification: (Detail the Why)**

AS APTI embarks on a new journey in producing content for multiple venues, the current and future additional staff need professional edit workstations to produce the quality programming we envision. Video content production will be feasible at lower cost as a result of this installation.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
 Disadvantages: Limited capacity for staff to produce programming

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total  |
|------------------|-------------|--------|--------|--------|--------|--------|
| Cash Expenditure | \$24,000.00 |        |        |        |        | 24,000 |

| Budget             |                 |          |
|--------------------|-----------------|----------|
| Item               | \$              | Comments |
| Project Mgmt       |                 |          |
| Design             |                 |          |
| Engineering        |                 |          |
| Direct Labor       | \$4,000.00      |          |
| Direct Materials   | \$24,000.00     |          |
| Indirect Labor     |                 |          |
| Indirect Materials |                 |          |
| Allocations        |                 |          |
| Contingency        |                 |          |
| <b>Total</b>       | <b>\$28,000</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: PRODUCTION GRAPHICS SYSTEM

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$38,500.00  
MINIMUM \$31,500.00

Capital \$ \$35,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Replace current 7-year-old graphics system for use with video production such as the daily weather program, Alaska Edition or others.

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase and install a new production graphics system.

**Project Justification: (Detail the Why)**

The outdated current graphics system is prone to breakdowns, causing delay and sometimes cancellation of the weather program. The computer hard drive has been replaced twice in the past three years.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
 Disadvantages: Weather program and other productions suffer degradation.

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total  |
|------------------|-------------|--------|--------|--------|--------|--------|
| Cash Expenditure | \$35,000.00 |        |        |        |        | 35,000 |

| Budget             |                 |          |
|--------------------|-----------------|----------|
| Item               | \$              | Comments |
| Project Mgmt       |                 |          |
| Design             |                 |          |
| Engineering        |                 |          |
| Direct Labor       | \$0.00          |          |
| Direct Materials   | \$35,000.00     |          |
| Indirect Labor     |                 |          |
| Indirect Materials |                 |          |
| Allocations        |                 |          |
| Contingency        |                 |          |
| <b>Total</b>       | <b>\$35,000</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: WIRELESS MICROPHONE SYSTEM

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$22,000.00  
MINIMUM \$18,000.00

Capital \$ \$20,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Replace existing wired Mic system for both TV and Radio

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase and install a new wireless Mic system

**Project Justification: (Detail the Why)**

Existing wired Mic system is prone to wire failure and induced noise. A wireless system will not only eliminate these issues, it will allow for talent to move around more freely during live and/or taped productions for both Radio and TV.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing Advantages: No capital cost  
Disadvantages: Live with a wired Mic system that is prone to failure

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total       |
|------------------|-------------|--------|--------|--------|--------|-------------|
| Cash Expenditure | \$20,000.00 |        |        |        |        | \$20,000.00 |

| Budget             |                    |          |
|--------------------|--------------------|----------|
| Item               | \$                 | Comments |
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        |                    |          |
| Direct Labor       | \$0.00             |          |
| Direct Materials   | \$20,000.00        |          |
| Indirect Labor     |                    |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$20,000.00</b> |          |



**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: VIDEO MONITORING -- PRODUCTION

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$27,500.00  
MINIMUM \$22,500.00

Capital \$ \$25,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Replace existing monitor wall in TV Studio Production Room

**Project Description: (Describe the project the Who, What, Where, and When)**

Replace the Plasma monitors in the production room with a new monitor wall system.

**Project Justification: (Detail the Why)**

The existing Plasma monitors, now eight years old, are beyond estimated life and no longer can be relied upon for quality judgment on production video output.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
 Disadvantages: Inability to monitor and control quality of production out

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total       |
|------------------|-------------|--------|--------|--------|--------|-------------|
| Cash Expenditure | \$25,000.00 |        |        |        |        | \$25,000.00 |

| Budget             |                    |          |
|--------------------|--------------------|----------|
| Item               | \$                 | Comments |
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        |                    |          |
| Direct Labor       | \$2,000.00         |          |
| Direct Materials   | \$23,000.00        |          |
| Indirect Labor     |                    |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$25,000.00</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: VIDEO MONITORING -- MASTER CONTROL

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$11,000.00  
MINIMUM \$9,000.00

Capital \$ \$10,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Expand Monitor wall in Master Control

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase and install new equipment to expand the monitoring capacity to better monitor the expanded multicast product.

**Project Justification: (Detail the Why)**

The capability to exception monitor all of Master Control sources and destinations is critical in providing a quality product. This expansion will give APTI better quality monitoring.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
 Disadvantages: Potential decrease in quality

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2 | Year 3 | Year 4 | Year 5 | Total       |
|------------------|-------------|--------|--------|--------|--------|-------------|
| Cash Expenditure | \$10,000.00 |        |        |        |        | \$10,000.00 |

| Budget             |                    |          |
|--------------------|--------------------|----------|
| Item               | \$                 | Comments |
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        |                    |          |
| Direct Labor       | \$0.00             |          |
| Direct Materials   | \$10,000.00        |          |
| Indirect Labor     |                    |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$10,000.00</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: RACK REPLACEMENT

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$27,500.00  
MINIMUM \$22,500.00

Capital \$ \$25,000.00 Expense \$  

Budgeted: YES  NO

**Management Summary: (Concise description of the project)**

Purchase new equipment racks for the control room

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase and install new equipment racks to house existing and new equipment that will not fit in the existing racks. Most new broadcast equipment is considerably larger than in years past and require racks that are 34 inches deep. Most of our racks are 30 inches deep.

**Project Justification: (Detail the Why)**

We need racks that our existing and new equipment purchases will fit into. Our racks are designed to act cooling towers with cool air below in the floor plenum being forced up through the rack and installed equipment to keep it cool. We currently have to either open or totally remove the back doors on the racks as the equipment and wiring will not fit. Equipment then operates at higher than recommended temperatures.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing Advantages: No capital cost  
Disadvantages: No place to install new equipment

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1     | Year 2  | Year 3  | Year 4 | Year 5 | Total  |
|------------------|------------|---------|---------|--------|--------|--------|
| Cash Expenditure | \$8,000.00 | \$9,000 | \$8,000 |        |        | 25,000 |

**Budget**

| Item               | \$              | Comments |
|--------------------|-----------------|----------|
| Project Mgmt       |                 |          |
| Design             |                 |          |
| Engineering        |                 |          |
| Direct Labor       |                 |          |
| Direct Materials   | \$25,000.00     |          |
| Indirect Labor     |                 |          |
| Indirect Materials |                 |          |
| Allocations        |                 |          |
| Contingency        |                 |          |
| <b>Total</b>       | <b>\$25,000</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: REMOTE PRODUCTION EXPANSION

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$44,000.00  
MINIMUM \$36,000.00

Capital \$ \$40,000.00 Expense \$  

Budgeted: YES  NO

*Management Summary: (Concise description of the project)*

Purchase new and replacement remote video and audio production equipment.

*Project Description: (Describe the project the Who, What, Where, and When)*

APTI will continue to purchase remote production equipment as necessary to properly equip our remote production personnel with sufficient professional equipment to do a satisfactory job.

*Project Justification: (Detail the Why)*

The current remote equipment needs to be augmented over time to replace inoperable non-repairable equipment and new tools that allow staff to do a better job. Most of today's remote production equipment is relatively inexpensive compared to ten years ago. But with the lesser expense certain equipment, including cameras, are considered "throw away" as the cost to repair exceeds the cost of total replacement.

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
Disadvantages: Potential limited remote production capabilities

*Project Risks and Uncertainties: (Obstacles to meeting objectives of project)*

Major obstacle is obtaining funding.

*Expected Cash Flow: (Anticipated spending pattern)*

|                  | Year 1      | Year 2   | Year 3   | Year 4   | Year 5 | Total  |
|------------------|-------------|----------|----------|----------|--------|--------|
| Cash Expenditure | \$10,000.00 | \$10,000 | \$10,000 | \$10,000 |        | 40,000 |

| Budget             |                 |          |
|--------------------|-----------------|----------|
| Item               | \$              | Comments |
| Project Mgmt       |                 |          |
| Design             |                 |          |
| Engineering        |                 |          |
| Direct Labor       | \$1,000.00      |          |
| Direct Materials   | \$40,000.00     |          |
| Indirect Labor     |                 |          |
| Indirect Materials |                 |          |
| Allocations        |                 |          |
| Contingency        |                 |          |
| <b>Total</b>       | <b>\$41,000</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: 10/100/1000 SWITCHES

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$44,000.00  
MINIMUM \$36,000.00

Capital \$ \$40,000.00 Expense \$  

Budgeted: YES   NO X

**Management Summary: (Concise description of the project)**

Replace existing LAN switches with auto sensing speed up to 1000mbps

**Project Description: (Describe the project the Who, What, Where, and When)**

Engineering will purchase and install new switches with the intention of replacing all existing switches over the next three to five years.

**Project Justification: (Detail the Why)**

Most newer, if not all, computer equipment is capable of operating on a LAN at 1000mbps. all of our current LAN switches are either 10mbps or 100mbps. It behooves APTI to continue to keep its LAN capable of the newer speed. One critical advantage of the higher speed is the capability of delivering high quality video to the desktop.

**Alternatives with Advantages and Disadvantages:**

Note: there are always at least two alternatives the one you want to do and doing nothing.

Alternative (1) Do nothing      Advantages: No capital cost  
 Disadvantages: Infrastructure will lag current technology and potentially limit staff the use of needed tools

**Project Risks and Uncertainties: (Obstacles to meeting objectives of project)**

Major obstacle is obtaining funding.

**Expected Cash Flow: (Anticipated spending pattern)**

|                  | Year 1      | Year 2   | Year 3   | Year 4   | Year 5 | Total       |
|------------------|-------------|----------|----------|----------|--------|-------------|
| Cash Expenditure | \$10,000.00 | \$10,000 | \$10,000 | \$10,000 |        | \$40,000.00 |

**Budget**

| Item               | \$                 | Comments |
|--------------------|--------------------|----------|
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        |                    |          |
| Direct Labor       | \$0.00             |          |
| Direct Materials   | \$40,000.00        |          |
| Indirect Labor     |                    |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$40,000.00</b> |          |

**Alaska Public Telecommunications, Inc.**

Project Authorization Form

Project Name: COMPUTER REPLACEMENT

TOTAL PROJECT FUNDING REQUESTED: MAXIMUM \$88,000.00  
MINIMUM \$72,000.00

Capital \$ \$80,000.00 Expense \$  

Budgeted: YES  NO

*Management Summary: (Concise description of the project)*  
Replace administrative computers every three to five years

*Project Description: (Describe the project the Who, What, Where, and When)*  
Engineering will set up a program to replace on a rotating basis 20% of administrative computers every year.

*Project Justification: (Detail the Why)*  
Computer life is now estimated to be five years or less. Both hardware and software become obsolete during that time. To insure the APTI infrastructure is properly equipped to provide its employees with the necessary tools to perform their functions, this project should be implemented.

*Alternatives with Advantages and Disadvantages:*  
 Note: there are always at least two alternatives the one you want to do and doing nothing.  
Alternative (1) Do nothing Advantages: No capital cost  
 Disadvantages: APTI computer infrastructure will not be current with industry needs.

*Project Risks and Uncertainties: (Obstacles to meeting objectives of project)*  
Major obstacle is obtaining funding.

*Expected Cash Flow: (Anticipated spending pattern)*

|                  | Year 1      | Year 2      | Year 3      | Year 4      | Year 5 | Total       |
|------------------|-------------|-------------|-------------|-------------|--------|-------------|
| Cash Expenditure | \$15,000.00 | \$15,000.00 | \$15,000.00 | \$15,000.00 |        | \$60,000.00 |

| Budget             |                    |          |
|--------------------|--------------------|----------|
| Item               | \$                 | Comments |
| Project Mgmt       |                    |          |
| Design             |                    |          |
| Engineering        |                    |          |
| Direct Labor       | \$0.00             |          |
| Direct Materials   | \$60,000.00        |          |
| Indirect Labor     |                    |          |
| Indirect Materials |                    |          |
| Allocations        |                    |          |
| Contingency        |                    |          |
| <b>Total</b>       | <b>\$60,000.00</b> |          |