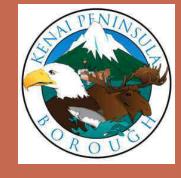
DISPATCH CENTER CONSOLIDATION OVERVIEW

FOR CITY COUNCIL WORK SESSIONS



OUTLINE



- 1. KPB Motivations and Background
- 2. Potential Benefits
- 3. Top Concerns and Responses
- 4. Next Steps

MOTIVATIONS FOR CONSOLIDATION



The borough is exploring this because we believe it will result in improved effectiveness of the 911 system for all borough residents and significant savings for all borough communities; however, the majority of those cost savings will be realized at the city level.

- 1. KPB has received both formal and informal requests from municipalities to review consolidation options
- 2. Timely now because of likely significant capital expenditure needs at all centers
- 3. The state fiscal environment is motivating all local governments to pursue efficiencies

REVIEW THUS FAR



Initial proposal developed by borough administrative team this winter (2015-2016)

Proposed to city managers and chiefs at meeting on April 14, 2016

Received and responded to specific city questions in June

Now at a point where city council feedback is requested

SPSCC HISTORY



The SPSCC purpose has always been to serve the needs of the public across the borough as well as fire, police, EMS and other governmental services.



KPB cooperatively operated dispatch center at Alaska State Troopers

2006

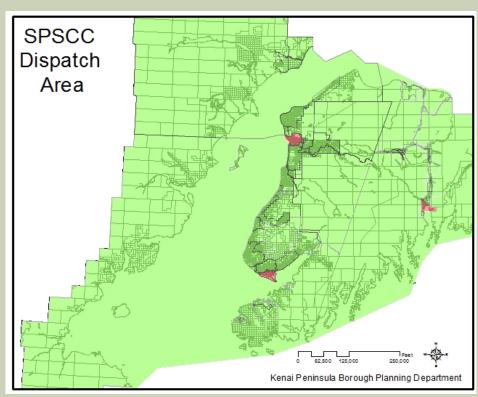
KPB completed construction of Emergency Response Center, including a secure floor for the SPSCC

2006 -2016

Ownership, operations, and management of the center belong to the borough.

THE SPSCC NOW



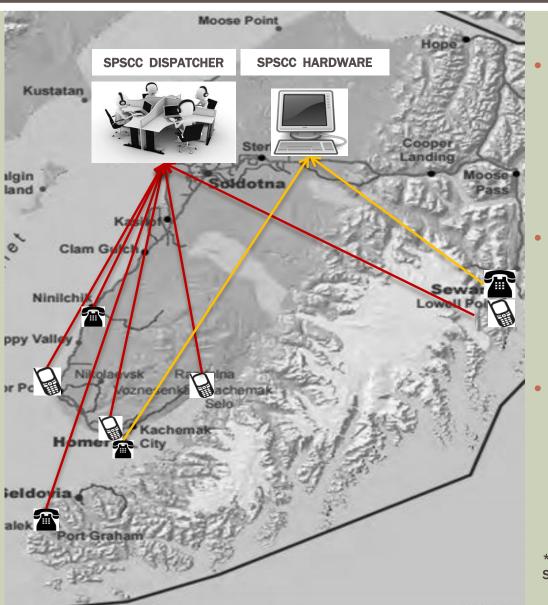


Green - SPSCC Dispatch Areas Red - City Dispatch Areas

 $^{\star}\text{City}$ of Seward also dispatches EMS south of the Y, including Bear Creek Fire Service Area

- 1. Dispatches for City of Soldotna, State Troopers, State Parks, Borough fire service areas*, multiple volunteer Fire/EMS, departments as well as other state and federal agencies.
- 2. Answers all cell phone 911 calls in the borough, determines jurisdiction, and transfers accordingly.
- 3. Serves as the default dispatch center when municipal dispatch centers are at call volume capacity.

Current first destination of all calls

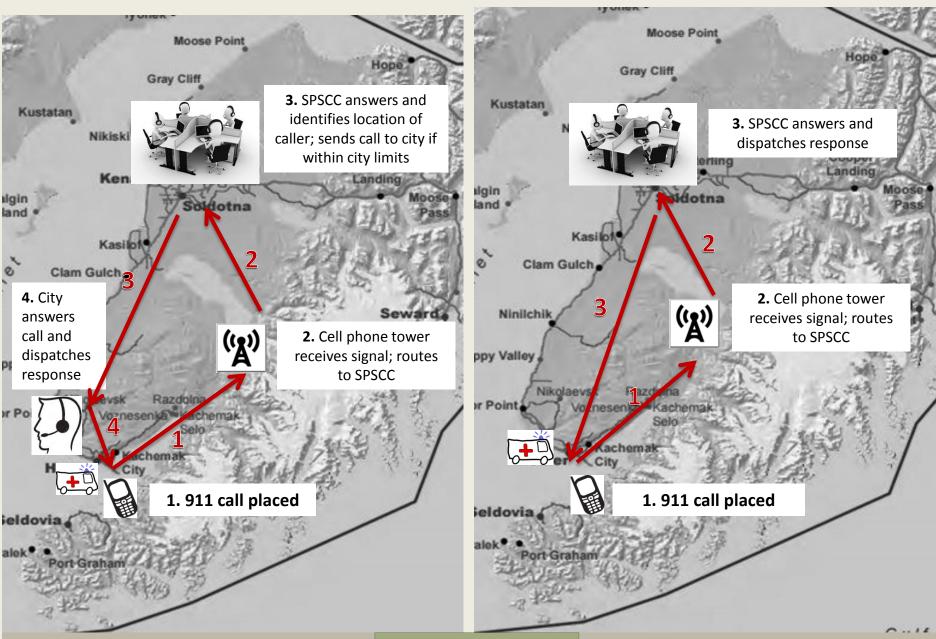


- All 911 calls in the borough, including both cellular and landline - regardless of their origination point - are first routed to the SPSCC*
- Cell phone calls are answered at the SPSCC and then routed to City dispatch centers if appropriate.
- Landline calls originating within city limits are received and routed automatically by KPB hardware

^{*}Either the Emergency Response Center in Soldotna or the Beacon Building in Kenai

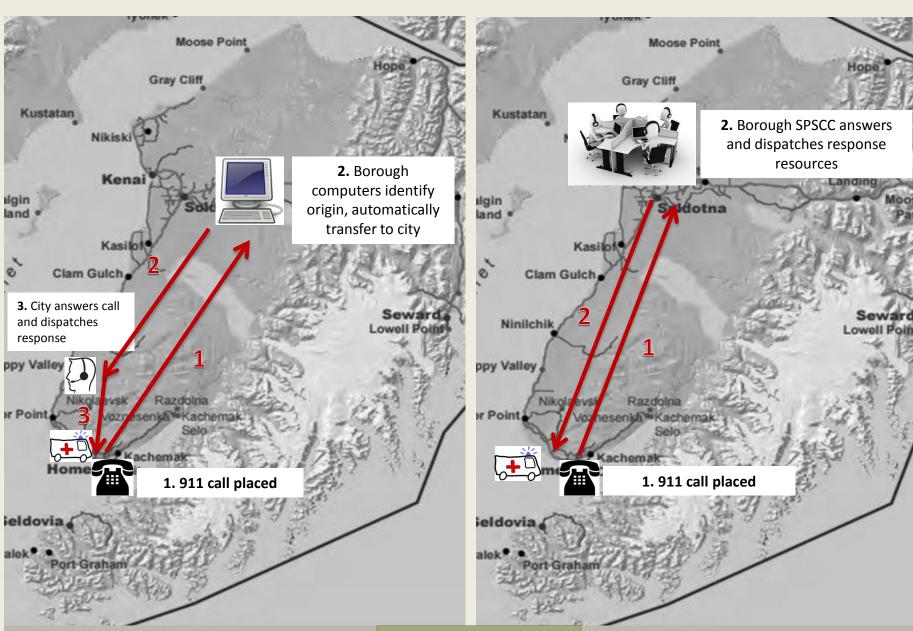
Current Life of a Cell Phone Call

Proposed Life of a Cell Phone Call



Current Life of a Landline Call

Proposed Life of a Landline Call



Background and Motivations

Potential Benefits

Concerns

Next Steps

SERVICE IMPROVEMENTS FROM UTILIZING AREA-WIDE CAD



- 1. Elimination of delays due to transfers from SPSCC to Cities
- 2. Consistent standardized dispatching across the Borough
- 3. The elimination of duplicate call handling of single incident (Ex: motor vehicle accident with injuries with City EMS/Fire and AST response)
 - Better information sharing during and after a call- with all players and a centralized view of the incident
 - Elimination of potential failure points due to miscommunications between multiple centers
- 4. Better law enforcement unit awareness and response for dayto-day interoperability as well as disaster response
- 5. Standardized use of Computer Aided Dispatch (CAD) as information repository

COST SAVINGS



- Economies of scale increased buying power at single larger center
- Significant cost savings from avoided duplication of equipment cost, training cost, operating cost
- Cost avoidance of new radio consoles
- Cost avoidance of upgrading to CAD
- Significant savings in personnel, services, supplies, maintenance, and capital costs

OTHER BENEFITS



- Quality Assurance:
 - Consolidated training and quality assurance provides a standard of training across the borough
- Major Disaster Preparedness:
 - Larger personnel base at the SPSCC a larger dispatch center is more easily scaled up in the event of a major emergency
- Efficient use of resources:
 - More employees are available to fill in during unexpected absences
 - Allow resource tracking and unit status management to maximize closest resource dispatch and enhancing response times
 - Keep track of the status of emergency units responding to calls, and a full accounting of public safety resources as they arrive on the scenes for fire, emergency medical, or police calls
 - Enhance quality of response and responder safety by alerting responders of potentially dangerous/hazardous situations based on prior incidents, warrants, previous medical responses, etc.

TOP CONCERNS AND RESPONSES



There are a number of workable concerns to consider, this section will discuss

- 1. Redundancy
- 2. PERS termination study
- 3. Local knowledge
- 4. Additional services
- 5. Agency input structure

REDUNDANCY



- Consolidating dispatch centers increases the reliability of this system because all 911 calls in the borough – including the cities – already go through KPB hardware first.
- Cell phone calls ring in to the SPSCC regardless of origin and are then transferred to city dispatch centers
- Landline calls are automatically transferred to the cities, but still first route through KPB hardware
- Removing the city dispatch centers removes multiple potential failure points from this system
- Consolidation would not change the current landscape of Police/Fire/EMS radio communications. Any radio redundancy that the municipalities employ would remain

PERS TERMINATION STUDY



- PERS termination study is likely avoidable.
- PERS acknowledges that a consolidation of positions between disparate municipalities and government entities can occur without a PERS termination study.
- The most effective approach to receiving an accurate response is a joint submittal from the KPB and the municipalities.
- The City of Homer and the KPB have submitted a request to PERS.
- This question can be resolved before municipalities commit to consolidation.

LOCAL KNOWLEDGE



- SPSCC currently dispatches to all geographic areas in the KPB surrounding city limits, resulting in foundational knowledge of all geographic areas and frequent callers within the borough.
- Region-wide use of CAD encapsulates local knowledge and knowledge of frequent callers regardless of location of caller or length of tenure of dispatcher.
 - Ex: CAD will record the number of times a 911 hang up call originates from one number.
 - Ex: Information about frequent callers is contained in the CAD system, those callers are not constrained to municipal boundaries. If a frequent Homer 911 caller leaves city limits and calls 911, the record of calls will be maintained.
 - Ex: Geographic "Common Names" are manually entered into CAD, a dispatcher new to the area can search for "Pickle Hill" if unfamiliar with the location.

ADDITIONAL SERVICES



- See KPB Response to City Comments for specific services
- The SPSCC will be able to offer the services that the cities require
- Some services may be best served by clerical or other nonemergency support
- Cities will need to work closely with the borough to determine the most efficient way to provide needed services

AGENCY INPUT STRUCTURE



Moving forward, we will need a service agreement establishing a partnership between the cities and the borough that:

- Contains costs and maintains stability
- Fairly distributes cost amongst users
- Guides operational decisions that impact services or costs
- Handles conflict resolution through a defined process
- Conserves the efficiency gained through consolidation

NEXT STEPS



- 1. Yes or No responses from cities on pursuing further
- 2. Work with Borough HR Dept. on PERS determination
- 3. Participate in creation of agency input structure
- 4. Develop service agreements with each city detailing specific services provided

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1. SUMMARY

The Soldotna Public Safety Communications Center (SPSCC) provides dispatch services to a number of borough service areas and the city of Soldotna. The borough is examining the possibility of offering these services to the cities in the borough that currently operate independent dispatch centers (Kenai, Homer, and Seward). This document proposes a fee structure for all agencies that a consolidated SPSCC would dispatch for. This fee structure is calculated based on the actual cost to run dispatch with the addition of Seward, Kenai and Homer dispatch centers. This structure may be changed slightly – based on the number of additional dispatchers needed – if all three cities do not decide to consolidate. The maximum borough-wide savings will be achieved with consolidation of all centers. This document is a DRAFT PROPOSAL only and is intended to outline a potential structure and important points of consideration moving forward.

Total direct cost for borough operated consolidated center: \$3,001,057

The cost of running this consolidated center will be split amongst all agencies that the SPSCC dispatches for, after the deduction of the E911 surcharge, State Park Service contributions, individual city specialized services, and borough general fund contribution. The borough general fund will cover small agencies that are not within cities or service areas (Moose Pass, Hope, Cooper Landing, and Ninilchik), 911 addressing, and the purchase of 6 new radio consoles.

This cost breakdown is based on the cost of running a center (FY2017 budget) with 6 additional dispatchers and .5 additional administrative assistants (Totaling 13 public safety dispatchers, 3 shift supervisors, 1 communications center manager, 1 IT specialist, 1 administrative assistant) There are also 8 state dispatchers and 1 state office assistant in the SPSCC.

This number also includes the estimated cost of annual training for airport response (\$8,000 annually), maintaining radio/IP linkage with Seward and Homer (\$232/month), and door buzz-in circuit charges (\$100/month for Homer and Seward, \$300/month for Kenai). However, city specific costs are billed separately and deducted from the overall budget before calculating cost/call. These fees are discussed in the specialized services below.

2. GENERAL COST BREAKDOWN

Event call volume, rather than 911 call volume, is the best way to measure cost allocation. The current borough CAD system will be able to track these numbers, and these numbers represent the proportional workload for each agency at the center. To account for year-to-year fluctuation, fees for call volume ranges have been established.

Police calls are generally more frequent and have a shorter duration, and are thus weighted at half of the cost per call (\$24/call). Fire and EMS calls tend to be longer duration and are thus weighted at \$48/call. This reflects

 $^{^{\}mathbf{1}}$ The state pays for a portion of personnel and equipment, these costs are not included in this discussion

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the average workload for each call, and is similar to the structure used by Fairbanks Emergency Communications Center. This ratio should be reassessed and adjusted at a future date to reflect relative average workload of the two types of calls. However, as there is not data collected at a standardized center at this time, a 2:1 ratio will be used.

Fire and EMS calls: \$48/call Police calls: \$24/call

Minimum fees for fire agencies will be based on 200 calls/year and police agencies will be based on 1000 calls/year. Fire agency rates will increase every 200 calls until reaching 1000 calls. At this point the rate will increase every 1000 calls. Rates for police agencies will increase every 1000 calls. This system is used by Fairbanks Emergency Communications Center.

This fee system is structured simply so that agencies participating in the SPSCC have a realistic idea of what they will be charged. These ranges should be reassessed when this structure is reviewed. If agencies in the borough frequently fluctuate between two blocks - for instance if the call volume of Anchor Point fluctuates regularly between 190 and 210 - this structure should be adjusted to maximize year-to-year stability and ease of agency budgeting.

Fire Agency			
0	200	\$9,600	
201	400	\$19,200	
401	600	\$28,800	
601	800	\$38,400	
801	1000	\$48,000	
1001	1200	\$57,600	
1201	1400	\$67,200	
1401	1600	\$76,800	
1601	1800	\$86,400	
1801	2000	\$96,000	
2001	3000	\$144,000	
3001	4000	\$192,000	
4001	5000	\$240,000	
5001	6000	\$288,000	

Police Agency			
0	1000	\$24,000	
1001	2000	\$48,000	
2001	3000	\$72,000	
3001	4000	\$96,000	
4001	5000	\$120,000	
5001	6000	\$144,000	
6001	7000	\$168,000	
7001	8000	\$192,000	
8001	9000	\$216,000	
9001	10000	\$240,000	
10001	11000	\$264,000	
11001	12000	\$288,000	
12001	13000	\$312,000	
13001	14000	\$336,000	

These rates are calculated by dividing operating budget (after deduction of E911 surcharge, State Park contributions, borough general fund contributions, and specialized services) by total weighted call volume to calculate a cost/call value. This will be recalculated after the first year of operating a consolidated center, and every three years beyond that. There will be a 2% annual increase in these rates to account for inflation.

All call volume charges after year one will be based on borough tracked call volumes for the previous calendar year, this will be standardized across all agencies. The borough will submit a notice by March 1st of each year,

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and an invoice by July 1st, which will be paid in full by September 30th each year. If this becomes effective in the middle of a fiscal year, the agency will pay a prorated amount for the first year. Rates for FY2017 will be based on CY2015 call volumes.

3. ANNUAL SPECIALIZED SERVICES

Fees will also include a cost for any specialized service outside of normal dispatch responsibilities. The below list includes fees for services that dispatch currently offers. Additionally services may be offered per agreement between the agency and the SPSCC, the fees for these services should be actual additional cost of providing these services at the center. Specialized costs are deducted from the operating budget prior to the calculation of the general cost/call discussed above.

Service		Rate	Measurement
Police Administrative Call Taking*	Upon request	\$1.50	Per call
Airport Preparedness Staff Training	Kenai required	\$8,000	Estimated annual training cost at 8 hours/dispatcher
TLS Circuit Charge	Homer Seward	\$232/month	Per month, if cities move to ALMR this charge will be eliminated
Buzz-in circuit charge	Homer Seward	\$100/month	Per month
Airport circuit charges	Kenai	\$300/month	Estimated – will be based on actual cost
Camera Access†	Upon request	TBD	Charge will include TLS circuit charge plus an additional \$143/month to increase TLS circuit speed, other charges will be agreed upon based on specific needs

^{*}For administrative calls, each city is responsible for coordinating with DPS to add a circuit to utilize the current administrative phone system, for configuring scheduled forwarding of administrative calls to the DPS line, for the cost of circuit tying their phone system to the DPS administrative system, and for any long distance charges incurred. Any call that does not result in a CAD Call for Service (CFS) will be billed at the administrative call rate. Any administrative call requiring CFS and associated records management data entry will be billed at standard rates.

[†]Camera systems must integrate with the current borough system and charges will be determined on an individual basis. Agencies are responsible for any set up cost. Passive access only, active monitoring not available.

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4. ONE TIME CITY INTEGRATION FEES

These costs reflect one time fees associated with the transition and integration of the dispatch centers. There will be a one-time integration fee of \$10,000 per city to cover general transition costs. Other costs are estimated in the table below, but will be charged to the cities at actual cost.

Service		Estimate	Measurement
One time integration fee	All cities	\$10,000	Flat fee
Radio/IP linkage*	Homer/Seward	\$6,000	Actual cost
Buzz-in capabilities	Homer/Seward	\$5,000	Actual cost
Airport transition	Kenai	\$15,000	Actual cost

^{*} Homer and Seward will be responsible for maintaining their own legacy radio system, and will be required to maintain the remote end of the radio-IP bridge.

5. ESTIMATED FEES PER AGENCY

General Cost

Agency	Fire and EMS	Police	Contribution
City of Soldotna	0	11,322	\$288,000
City of Kenai	1,378	7,840	\$259,200
City of Homer	637	8,819	\$254,400
City of Seward*	694	3,728	\$134,400
KESA	174	-	\$9,600
Central Emergency Services	2,802	-	\$144,000
BCFSA	130	-	\$9,600
Nikiski Fire Service Area	884	-	\$48,000
Anchor Point	213	-	\$19,200
State Park Service	Pays for 1 disp	oatcher	\$105,000
Total			\$1,271,400

^{*}Seward call-volume CY2015: SVAC 523, SVFD EMS 205, SVFD Fire/Other 144. To avoid charging Seward twice for EMS calls, SVFD EMS calls are not included in total Fire/EMS call volume

Specialized Cost

Will be determined based on additional services selected by agencies and actual cost.

Agency	Туре	Fee
City of Kenai	Airport training, airport circuits	\$11,600
City of Homer	TLS Circuit, buzz-in circuit	\$3,984
City of Seward	TLS Circuit, buzz-in circuit	\$3,984
Total		\$19,568

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Integration Cost

Estimated one time cost of integrating new centers. This is not included in overall operating budget overview below, as these fees are specifically to cover transition costs, not annual operating budget.

Agency	Туре	Fee
City of Kenai	Integration, airport	\$25,000
City of Kenai	Integration, radio/IP, buzz-in	\$21,000
City of Homer	Integration, radio/IP, buzz-in	\$21,000

Total Charges

Estimated total cost of consolidated center per agency.

Agency	First Year	Annual
City of Soldotna	\$288,000	\$288,000
City of Kenai	\$295,800	\$270,800
City of Homer	\$279,384	\$258,384
City of Seward	\$159,384	\$138,384
KESA	\$9,600	\$9,600
CES	\$144,000	\$144,000
BCFSA	\$9,600	\$9,600
Nikiski Fire Service Area	\$48,000	\$48,000
Anchor Point	\$19,200	\$19,200

Borough Charges

The borough general fund will cover the following costs

Item	Measurement	Cost
Radio replacement*	Annual budget	\$98,963
911 Addressing	Annual budget	\$122,115
Small agency calls+	433 calls (401-600 block)	\$28,800
Total		\$249,878

^{*}The equipment replacement fund will be used to cover the cost of 6 new dispatch radio consoles

This document provides an estimate of consolidation costs. If additional services and integration costs specific to each city are identified, these costs will be billed to the integrating agency. General unexpected transition costs for the SPSCC itself will be covered by the borough. Estimated costs include:

Item	Measurement	Cost
ProQA software licensing	One time	\$11,000
New equipment	One time	\$20,000
Total		\$31,000

[†]Hope (19), Ninilchick (229), Cooper Landing (123), Moose Pass (62)

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6. CONSOLIDATED CENTER BUDGET OVERVIEW

Consolidated dispatch budget summary			
Revenue from agencies	1,290,968		
E911 revenue	1,544,348		
Borough general fund	249,878		
Total revenue	3,085,194		
FY 2017 budget	2,431,295		
- E911 Payments	(158,400)		
+ 6 dipatchers, .5 admin	708,594		
+ Airport and radio/IP costs	19,568		
Total consolidated annual budget	3,001,057		
Fund Balance	84,137		

7. AGENCY INPUT

Cities will be charged based on their actual call volume collected by the CAD system at the SPSCC. Actual costs after year one may vary from estimated costs in this document, as there is not currently a unified way of collecting call volume data. Fees will be determined based on calendar year call volume and charged to cities on an annual basis during fiscal year budget preparation. The base rate (fee/call) will be recalculated every three years based on overall center call volume and operating budget.

In order to account for advances in technology and other changes in dispatch center operations, the entire fee structure will need to be reassessed periodically. The group for this fee structure reassessment will include representatives from each of the agencies participating in the call center. In addition, there will need to be an avenue created for input on fee methodology and other aspects of dispatch operations.

This proposal does not go in to detail on the structure of this group, which will be worked out with the agreement of all agencies.

8. E911 SURCHARGE

The borough will continue to collect all E911 surcharges and this charge will be deducted from overall operating cost before rate per call for Fire, EMS, and Police are determined.

DISPATCH CONSOLIDATION ESTIMATED CITY COST SAVINGS

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Cost savings for each city will vary based on the current operating budget and the services the city intends to retain. The following are rough estimates of cost savings based on the most recent dispatch operating budget provided to borough staff and on estimated costs and cost avoidances, these numbers could vary greatly in practice and cities should individually assess budget implications of consolidation.

Kenai

The estimated annual cost for Kenai of a consolidated center is \$323,600: \$259,200 for dispatch, \$11,600 specialized fees, and a \$52,800 reduction in E911 payments from the borough. Based on Kenai's \$853,715 annual dispatch operating budget, Kenai would see a net \$530,115 annual difference in cost.

Consolidating prior to radio purchasing will save Kenai an additional \$265,000 in cost avoidance: \$290,000¹ for two new radios, minus the \$25,000 borough integration fee. This results in an **estimated \$795,115 difference in the first year.**

Kenai Summary			
Dispatch borough fee	\$259,200		
Specialized fees	\$11,600		
Reduction in E911	\$52,800		
Consolidated annual cost	\$323,600		
FY 2016 operating budget	\$853,715		
Net annual difference	\$530,11 <u>5</u>		
One time cost avoidances			
Avoidance of new radio consoles ¹	\$290,000		
Borough integration fees	-\$25,000		
Total first year cost avoidance	\$265,000		
First year difference	\$795,115		

Homer

The estimated annual cost for Homer is \$311,184: \$254,400 for dispatch, \$3,984 specialized services, and a \$52,800 reduction in E911 payments from the borough. Based on Homer's \$631,045² annual operating budget, Homer would see a net \$319,861 annual difference in cost.

Consolidating prior to radio purchase will save Homer an additional \$269,000 in cost avoidance: \$290,000 for new radios, minus the \$21,000 estimated cost of radio/IP linkage and integration fees with the borough. This results in an estimated \$588,861 difference in the first year.

Homer Summary			
Dispatch borough fee	\$254,400		
Specialized fees	\$3,984		
Reduction in E911	\$52,800		
Consolidated annual cost	\$311,184		
CY 2016 operating budget ²	\$631,045		
Net annual difference	\$319,86 <u>1</u>		
One time cost avoidances			
Avoidance of new radio consoles	\$290,000		
Borough integration fees	-\$21,000		
Total cost avoidance first year	\$269,000		
First year difference	<u>\$588,861</u>		

¹ \$290,000 based on Motorola quote provided to borough for upgrading 2 radio consoles. Actual cost avoidance may vary based on number of upgrades and other factors.

Personnel costs account for 95% of Homer's 2016 dispatch operating budget. It is likely that there are additional operational costs to Homer that are captured elsewhere in the city budget.

DISPATCH CONSOLIDATION ESTIMATED CITY COST SAVINGS DRAFT

Seward

The estimated annual cost for Seward is \$191,184: \$134,400 for dispatch, \$3,984 specialized services, and a \$52,800 reduction in E911 payments from the borough. Based on an annual cost of \$485,062³, Seward will see a net \$293,878 difference annually.

Consolidating prior to radio purchasing will avoid an additional \$124,000 in cost: \$145,000 for a new radio minus \$21,000 estimated cost of radio/IP linkage and integration fee with the borough. This results in an estimated \$417,878 difference in the first year.

Seward Summary			
Dispatch borough fee	\$134,400		
Specialized fees	\$3,984		
Reduction in E911	\$52,800		
Consolidated annual cost	\$191,184		
FY 2016 budget ³	\$485,063		
Net annual difference	<u>\$293,878</u>		
One time cost avoidances			
Avoidance of 1 new radio console	\$145,000		
Borough integration fees	-\$21,000		
Total cost avoidance first year	\$124,000		
First year difference	\$417,87 <u>8</u>		

Soldotna

Dispatch for the city of Soldotna is already operated by the SPSCC. Although costs for the city will go up with this proposal, putting a fee structure in place will be advantageous for the city in the long run. An established structure will allow for Soldotna to reasonably estimate what their costs for dispatch will be in the future and eliminate the likelihood of sudden drastic changes due to budget or administration changes. This will also put in place an avenue for Soldotna, along with the other cities, to provide input on the pricing structure on a regular basis.

³ Based on only total personnel costs provided by City of Seward, dispatch costs are not separated from Police costs in Seward annual operating budget

This document includes responses to concerns about a consolidated center and inquiries about additional services a consolidated center would provide. Please note that at this point we are only able to say we likely can or cannot provide certain services, the details of which services are provided and the related cost will need to be agreed upon as this process continues.

1. Questions regarding additional services provided by dispatch

Cameras

- O The issue of what constitutes "monitoring" is the larger question. If, as assumed, the cities currently utilize security cameras in a passive manner, primarily for situational awareness and post-incident research, SPSCC could be given access to provide the same. SPSCC would not likely be responsible for pro-active monitoring, as this implies 24/7 awareness rather than simple availability.
- Cost to establish access has not yet been determined, and would be specific to each agency's needs. Agencies already using IP based camera systems should be capable of providing access with minimal cost. The \$143/month TLS circuit charge would simply make the system available to the SPSCC.

Municipal tasks

After consolidation, municipal tasks that may have been assigned to Dispatch staff to take advantage of their 24/7 staffing should probably be evaluated to determine if 24/7 emergency support is actually necessary. Given that dispatch is a high cost service, rather than establishing the service at the SPSCC, cities might find it more cost effective to handle after hours response similarly to KPB Maintenance. KPB Maintenance responds to critical off hours needs at 46 schools and several dozen KPB facilities simply by providing emergency contact info to the public. Maintenance staff fields these calls directly. If the issue being addressed truly rises to level of an emergency (structure fire/vandalism/etc.), then 911 services should be contacted anyway.

Local-alarm ring down

- This is also not a question of technical feasibility but one of appropriate use of dispatch services, as changing a ring-down destination should be a fairly simple technical task.
- Please see list at the end of this document for responses to additional services listed by Kenai

2. Redundancy and back up plans

 With digital systems (such as ALMR and SPSCC's MicroData 911), redundancy and fault tolerance are different but related. While we are not in a position to speak to ALMR system topology, there is a substantial degree of both redundancy and fault tolerance built into the

SPSCC's MicroData 911 solution. I believe the concern raised here is strictly related to transport redundancy between SPSCC and Homer. It is true that most carrier based(ACS/GCI/AT&T) communications traffic between Soldotna and Homer follows common pathways, with carriers leasing bandwidth/fiber/copper from each other where needed. It is also true that those carriers have substantial redundancy built in to their systems. Our observation is that uptime between SPSCC and HPD approaches 99.995%, but we always strive to achieve the greatest reasonable redundancy/fault tolerance possible where 911 service is concerned. It is our understanding that the State has a microwave link between Soldotna and Homer, and we have discussed the possibility of using this link as a backup for public safety traffic. This could provide redundant transport between SPSCC and Homer.

- The next generation of consoles are IP based, so the method for bridging remote radio frequencies is changing.
- Consolidation would provide area-wide CAD. If KPB will be dispatching over legacy frequencies using existing network connections through dispatch, we could leave SIP phones in place which would provide a local call end point in the event of a catastrophic failure.
- Mobile units and portables could provide emergency radio backup, if ALMR or similar is improved at State level. If cities choose to discuss risks/benefits of transitioning to ALMR, it should be considered an issue separate from any consolidation discussion.
- It is important to note that ProComm is not an unbiased player in this conversation. They have a strong vested interest in selling hardware and services. They are certainly aware that establishing a hard requirement for a new transport path between SPSCC and HPD could drive business their way. None of this is said to discount ProComm's expertise in the wireless communications arena (which is significant), it simply must be considered in evaluating their advice.

3. Local knowledge, non-numeric addresses, unfamiliarity with spatial layout of area, familiarity with callers etc

- The SPSCC currently dispatches all areas surrounding the Homer, Kenai, and Seward City
 Limits. All calls for service—as well as frequent callers—are documented in Computer Aided
 Dispatch (CAD). This information is captured and easily accessed by any public safety
 dispatcher, regardless of their tenure.
- The CAD system has the ability to use "Common Names" (that we manually enter) to identify businesses, etc. It is a common feature of CAD providers to encapsulate local knowledge for this reason. As part of implementing a consolidated dispatch arrangement, we would establish a review/submission process for "Common Names" in each locality.

- The borough GIS mapping system has few peers, and is highly regarded by vendors that usually provide that service, often dropping GIS development from quotes in favor of using the boroughs system as more cost effective and efficient. The primary reasons for updating dispatch when moved to the new facility in 2006 were to provide improved call routing based on emergency service zone (ESZ = City or vicinity) and to improve responder response and routing by using the mapping capability of the new system installed at each city 911 center by the borough.
- As for needing a uniform and widely accepted address system, we all agree on that. For nearly two decades, the Borough and Cities have had agreements in place to provide accurate addressing for the local Street Addressing Guide (SAG) and area wide Master Street Addressing Guide (MSAG). Cities have been provided a sum of money annually to provide that information in compliance with National Emergency Numbering Association (NENA) Standards, and to perform certain call taking in areas adjacent to their area as needed. KPB already employees a full-time 9-1-1 Addressing Officer to ensure all addressing is uniform throughout all municipalities. The Borough's addressing officer maintains the borough-wide MSAG and addressing on behalf of the borough and relies on the SAG data from cities for City mapping and addressing.
- If the Borough numerical addressing is lacking, it should be enhanced. If this question is related to City numerical addressing, the City has a means to improve that, similar to the borough

4. Need more detail on how a consolidated dispatch would address RMS and ARMS generation, integration, completion.

- There are two solutions for a smooth, viable transition and continuity of operations. The
 first (and preferred model), all agencies would utilize ARMS as their RMS. The second would
 require a software integration between SPSCC CAD and responding agency's RMS. (side
 note—it was \$18,000 for the SPSCC CAD -> ARMS interface)
- · RMS has always been the originating agency responsibility.

5. Doesn't provide line of sight VHF Ch. 16 156.8 Mhz coverage, which may need to be maintained locally, or reduced/eliminated.

· The communications resources they use today should not be impacted.

6. (PERS) Termination study potential

- HR posed this question to PERS; PERS acknowledged a transfer of PERS positions between PERS enrolled organizations CAN occur, but they need all details before putting anything in writing.
- HR has suggested cities may want to keep one dispatch position on the books (but unfilled) to ease re-filling if the situation changes in the long term.

- The KPB feels that a PERS termination study may be avoidable.
- The most effective approach to receiving an accurate and positive response from PERS would likely be the result of a collaborative effort between the KPB and the cities. A "package" that included specifics from each of the cities and the KPB and contained the overall plan for what the FTE's and employed positions would look like after consolidation should provide PERS with the information they need to make a decision.

7. Capital cost avoidance

- Estimated one time cost savings are laid out in the original proposal provided to cities. Cost savings must be quantified by cities.
- KPB does not believe that cities dispatch would need to purchase new radio consoles, as operations would be moved entirely to the SPSCC. The KPB is purchasing 6 new radio consoles this year. This is significant cost avoidance for all cities.

8. Control and the future administration

 Should the cities agree to move forward with this process, determining the control and administration structure would be the next step. This structure will be developed through a collaborative effort with all cities.

Responses to additional services inquired about by the City of Kenai

- Water & Sewer Utility Support Kenai Dispatch currently monitors the alarms of the City's Water, Sewer, and Wastewater Treatment Plant. Water and Sewer personnel are notified upon receiving an alarm.
 - We currently monitor a few City of Soldotna and KPB automated alarms (i.e. Sewer Treatment Plant, lift stations, schools, Nikiski Pool, etc.) These are automated alarms that ring into our unpublished 10-digit emergency line. We could accommodate this for other cities. Alternatively, since a dispatcher cannot diagnose the alarm nor resolve any issue, only place a call (possibly repetitive calls) it may be more cost effective to rout these calls through an alarm monitoring company or directly to a smart phone of a public works person.
- Fire pumps at the City's water reservoir at the request of the Fire Department.
 - Can be provided with fees for additional circuits
 - This is an essential service during structure fires to boost pumps for proper flows. This is activation by a single switch upon request by the fire officers.

Kenai Municipal Airport Support

- We understand that much of the Kenai Airport support is non-negotiable for the city; the services are required and must be provided. What could be changed is how the services happen (using new technology) etc, but meeting the requirements with FAA regional office approval and sign off. This consolidation may even require that approval. We understand that this is a critical service that will need to be managed with appropriate technology and be a priority in the consolidated 911 center. Working through the details of the municipal airport requirements and support will be a significant step in this process.
- Three-way crash phone: Provided with additional circuits needed + fee for additional dispatcher training and service (discussed in original proposal)
- **Kenai Street department support:** Kenai Dispatch notifies Street Department personnel when police officers determine snow accumulations or ice conditions require after hour response.
 - O Possible with a fee for service. KPD could notify comm center who would call Kenai PW Dept to manage street communication and ground services; little reason for dispatch to monitor the function after call out, only to be informed when completed; airport FD or assistant airport manager can manage the correspondence to FAA.
- Kenai Dispatch provides support for contacting vehicle owners during snow removal activities of the department.
 - This would seem like a high volume task when it happened, and likely wouldn't be handled by a consolidated center.
- **Record management:** Anything related to their RMS—Spillman—would be resolved with an interface with our CAD* including:
 - Dispatch creates case number, description of call in our Records
 Management System (Spillman)
 - Dispatch links all the people and vehicles in Spillman
 - Dispatch creates people, vehicles, locations in Spillman
 - Dispatch enters stolen property in Spillman
 - Officers do link some people in Spillman but Primary work in Spillman is done by dispatch.*

- Dispatchers do research in Spillman and provide case involvements and connections to officers to assist in investigations.*
- Dispatchers provide Spillman information during traffic enforcement, parking issues, and other municipal ordinance issues in order to assist officers and summer hires in making enforcement decisions.
- Dispatchers commonly research other open sources for information related to cases. SPSCC currently provides this service to users
- Dispatch prints all persons and vehicles in APSIN. SPSCC currently provides this service to commissioned officers without APSIN access
- Dispatch prepares "six-pack" photo line-up's for officers when requested. SPSCC currently provides this service to users
- Dispatch maintains daily log of police activity based on calls, with constant update, for review by officers on shift A daily log can be generated from CAD.
- Dispatch enters arrests in APSIN and in Spillman. SPSCC currently enters all arrests in APSIN—Spillman would require an interface
- Dispatch notarizes documents, including charging documents for felonies. SPSCC currently provides this service to LEO
- Dispatch writes press releases on arrests. All LEO currently complete their own press releases
- Dispatch completes ATN and Kid CID forms for criminal charges for adults and kids.
 All LEO we currently dispatch for complete their own ATN's and CID's
- Dispatch modifies and updates criminal complaint forms for the officers. All LEO currently modify and update their own criminal complaints
- Kenai Dispatch provides 24/365 in person response to the public at the Kenai Police
 Department. This is a paradigm shift KPD would have to adapt to. SPD is a good example of
 a Monday Friday 0800-1700 police department with a ring down system in place after
 hours and on weekends.
- Clerical tasks: The following clerical tasks a clerk for the city may be able to complete, and the SPSCC would likely not take on:
 - o Dispatch creates paper case files with all documents in it. Dispatch locates pictures of suspects (DMV or other source) includes copies in case file.
 - Officers complete reports in RMS and Dispatch reviews all reports turned in for errors primarily spelling and grammar, but also factual like names and dates of birth. Dispatch prints all reports, organizes case file documents and numbers case documents in files.
 - Dispatch makes copies of case files for distribution to DJJ, AST, DAO,OCS, FBI, etc.
 - Dispatch faxes, mails or prepares hard copies of reports to send to other agencies

Miscellaneous Support

- Kenai Dispatch opens and closes apparatus doors for the Kenai Fire Department and Station 1 and at the Airport Operations Center. Dispatch also controls Police Department garage doors.
 - Possible with additional circuits needed + fee for service
 - See comment in Kenai Muni Airport Support; this would be a communication center priority and could occur using current technology.
- Kenai Dispatch monitors alarms for all City elevators.
 - Should be possible with ring down lines, such as KPB elevators
 - Additional circuits needed + fee for service
- Kenai Dispatch monitors panic alarms for Kenai City Hall.
 - Possible with additional circuits needed + fee for service
- Kenai Dispatch provides support to personal use fishery fee shacks by dispatching personnel to take money from the shacks based upon emails received by the cashiering system.
 - This is just a notification that goes out when cash hit's a certain level at the shacks. No reason it couldn't go to any city employee.



Office of the City Manager

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Memorandum

TO: Mayor Navarre, Kenai Peninsula Borough

FROM: Katie Koester, City Manager, City of Homer

DATE: May 17, 2016

SUBJECT: Dispatch Consolidation

Redundancy/loss of connectivity

This is a big issue for the City, Homer is the most distant client in this proposal. How would redundancy be provided if connectivity is lost? This happens from time to time now. According to our consultant, ProComm, employing 2 systems, like ALMR and HPD 1&2 or HVFD 1&2 is not redundant, once connectivity to Homer is lost we would be 100% down. I understand that we cannot necessarily plan for 'the big one,' but it is a policy call to decide how much risk we are willing to take on. I am unable to say with confidence that the risk of losing connectivity is limited to a major, regional natural disaster and would like a greater degree of assurance that routine outages can be prevented.

Extra charges/services

Cameras. Like Seward, the City of Homer has a number of security cameras that are monitored by dispatch (airport, port, etc.) From the paperwork you presented at the meeting, this looks like a \$143 charge per month per circuit?

Cost for other departments. Depending on events, there can be a lot of radio work for dispatchers with Public Works and Port and Harbor. KPB dispatch would have to tie into the Harbor radio system and Public works repeaters, which would have an equipment cost and call level cost.

Local alarms. There are several local alarms that ring into dispatch (panic buttons at City Hall, the College, High School, etc.). There are also alarms for the water treatment plant and pump stations. What will that service cost? Can it be provided?

Cost

We have confirmation from the state that by eliminating the classification of employees – dispatchers – it would trigger a termination study.

The HPD does not track call volume with the same software the Borough does. Though we had dispatch go through the call log by hand to try and come up with more comparable statistics, we are certain our call volume – and therefore cost – will increase under the CAD system used by KPB. Under the proposal, Homer would be paying less than Soldotna. HPD is a busier department than Soldotna and our call volume under CAD would reflect that.

Local Knowledge

The importance of local knowledge is more than just knowing the local geography and landmarks. Our local dispatchers know the frequent callers, know when to take a call more seriously and can think quickly to apply local resources in a situation. At least once a year we have a potentially major incident turn out well because of this type of local knowledge.

Capital cost avoidance

This may be an area where municipalities can experience true cost savings. It would be helpful to understand what one time cost saving there are (new radios that cities would have to buy anyway) and what ongoing savings there would be (ongoing dispatch equipment replacement cost?).

The City of Homer is in the process of designing a new police station. There will be a cost avoidance in not housing dispatch that Council will need to consider.

Control and the future/ administration

What is the guarantee to municipalities that this cost will not escalate in the future? How will all the municipalities have a true seat at the management table? I know this question is equally important to the administration as it is to the municipalities. I do not have a solution. A joint operating agreement where each municipality has a seat may be a viable option, but I would worry that efficiencies would be lost in this type of management structure, which could drive up cost. I also worry about a central peninsula bias in such a structure. Figuring out this structure would be a necessity before making any final commitments. I am interested to see proposals from the other municipalities, or a consultant that specializes in 911 services, on how to handle this issue.

City of Homer staffing under a consolidated dispatch

The staffing needs for HPD are one jail officer (dispatch currently monitors cameras when there is no coverage in the jail) and 2.5 administrative support staff. We also would need some increased overtime hours for the officers for the paperwork processing dispatch helps with. A good argument can be made that the City should be replacing a jailer regardless of the location of dispatch. However, this would still not push the needle to an annual cost savings for the City of Homer.

Salary <u>&</u> Wages	Benefits Total	Total Labor Costs
65,000	34,130	99,130
60,000	32,612	92,612
28,000	22,899	50,899
46,000	28,363	74,363

2.5 dispatchers retained as staff = \$317,000/ year Total Labor Costs

+ 1 jailer added

350 hours additional OT officers = \$14,000/year

PERS Termination Study estimate = \$130,000/ initial year = \$85,000 / every year after

First year = Costs City \$461,000 (Labor Costs/OT/PERS Termination estimate)

Every year after = \$416,000 (Labor Costs/ OT/ PERS Termination estimate)

In Summary

Thank you for taking on this incredibly complex issue. As this concept progresses, the City would like to see a radio systems engineer to design the connectivity needed for a joint dispatch center. The engineer can design the center and the satellites as a unified system connected with multiple redundant links for reliability. An emergency communications consultant with experience in 911 systems and radio systems should be employed in system design and to ensure all users are treated equally. A radio systems consultant, the City of Homer uses ProComm, could provide a feasibility assessment before investing significant dollars in design. Radio communications is a very complicated topic. With these assurances from professionals, I think removed locations like the City of Homer would feel much more secure that we are not taking on an untenable amount risk.

The City of Homer is willing to see this process through until we can get more reliable information and assurances on some of the larger unknowns. Given the preliminary numbers I am skeptical this will be financially feasible for Homer. Nevertheless, there are many moving pieces and it is important to explore all the options and present Council with the risks and benefits of consolidation.



Volunteer Fire Department

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Memorandum

TO: Katie Koester, City Manager

FROM: Robert Painter, Chief

DATE: October 12, 2016

SUBJECT: Consolidated Dispatch Services

As an end-user of dispatcher services in Homer I would like to offer the following comments regarding the consolidation of dispatch with Soldotna. While the technology has improved over the years that make consolidation more practical, and even possible, I believe there remains a large question as to the resilience of those services during and following a disaster, such as an earthquake. As the Director of Emergency Services I feel it is incumbent upon me to suggest that while consolidation may be feasible during "routine" day-to-day operations, it does not relieve us of the responsibility of having a reliable and instantaneous backup available when the link(s) between Homer and Soldotna are severed, for whatever reason. Requiring the city to maintain a technologically current system, which could be utilized when necessary, does not accomplish the reasonable expectation of "readiness" in the face of disaster? Losing our local dispatch personnel will mean that there is no one trained, or available, to dispatch locally even if we maintain, as we should, the technical capacity to perform those services.

There is also the obvious loss of local control over how dispatch functions for all of the users, of which HVFD is only one. Having dispatchers with an intimate knowledge of local conditions and resources is often of value during an emergency response. We currently know each of the local dispatchers through personal contacts, when they initially train (each new dispatcher is oriented to HVFD during a visit) and through annual training offered to HPD by fire department instructors. Transferring dispatch to Soldotna will completely eliminate any possibility of developing knowledge of our response area or capability and will result in dispatch relying on GIS data, which if you ever use GPS technology around Homer, you know is often obsolete and technically flawed.



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Katie Koester

City Manager – City of Homer

KPB Dispatch Consolidation Slide Presentation Review #2

Upon review of the KPB Dispatch Consolidation slide presentation, please accept the following review.

Slide 3 – The City's all use Borough supplied E911 from MicroData/TCS. In the RFP that the Borough released called for such a design where calls and caller number and location information could be easily transferred for local service in those cities. If KPB shuts this down and does local dispatch themselves from Soldotna, they can forego the expense of what little maintenance if any that they do, and the cost of the use of the Borough LAN for connectivity. This is also a way to save money "for them" to upgrade the system and put it all in to one center "for them" in Soldotna. There-in lies the problem. A single E911 or radio dispatch location is not prudent and there is no redundancy and no backup if they go down so there is no "improved effectiveness" by doing this.

The "significant capital expenditures" referenced are referring to radio console life cycle replacement which is done with grant funds so there is no real cost avoidance to the city except for what matching funds that may be required. I have quoted Chief Robl, Kenai, and Seward the upgrades and again grant funding is required, not city capital. In their "cost avoidance" figures, they should take those funds out of the numbers because those are "one-time" grant funds to complete a specific project.

It is true that in theory consolidation would result in Cost Savings to the cites because there would be no dispatch center to operate and staff, but there is no safety net for the Kenai Peninsula Borough communities – YOUR Community – to serve the needs of public safety for YOUR residents.

Major Problem: Soldotna has 5 positions of dispatch going to 6 positions of dispatch to add extra head count (4 of them – 1 person









for days, swing, and graveyard, plus days off) because of their anticipated work load today, not tomorrow after "consolidation". They are so busy from May to September during tourist season, they can barely handle the workload today. Now imagine if you eliminate 3 positions at Kenai, 2 positions at Seward, and 3 positions at Homer. This requires Soldotna's sole location to carry a load that is incomprehensible with their 6 positions, when they suggest replacing 8 existing positions in three other cities! So under consolidation they would have to staff for the equivalent of their 6 plus the other city's 8 positions, and then they would be using 6 positions to do the work of 14? Not a good plan.

The fact that the "state fiscal environment is motivating all local governments to pursue efficiencies" is a true statement, but there is no other priority for YOUR community than public safety and what it takes to deliver that efficiently, reliably, and without failing when mission critical requirements are needed.

Slide 7, 8 & 9 – SPSCC serves as the default dispatch center covers when muni call volume exceeds their capacity? Under this proposal by taking on 8 more positions of responsibility and due to the fact that they are already overloaded at SPSCC without adding 3 more muni locations, how are they going to handle the volume overload from other centers at all? This is a broad statement that needs to be explained with specific information.

NOTE: The KPB MicroData/TCS E911 system that they use is programmed to forward all wireless callers to Soldotna per this slide information. There is no good reason to do that when you can share the load for call distribution. That call distribution can be easily changed which would improve response times to those callers that they "have to transfer" to other centers now. It's done in the Phase I and Phase II wireless ALI database for location information, using Automatic Call Distribution (ACD) in the software that routes the wireless caller to the NEAREST Public Safety Answering Point (PSAP), not just Soldotna. A total of 65% of their E911 calls came from cell phones and that will only increase, so it should be divided up amongst the PSAPs for efficiency, as well as the E911 Surcharge









Funds! Consolidation will result in "throwing away" E911 software and radio console systems that have been purchased with other grant funds when it could all be used to become more efficient and be used to provide better service to Borough and muni residents. Just imagine Seward on the 4th of July Mount Marathon race with all the Trooper traffic at Exit Glacier and SPD / SVFD traffic in town, then add Homer, Kenai, and Soldotna in it with 200,000 people on the Kenai Peninsula. Not a pretty picture. If they saved a Million Dollars and lost one life because of the lack of dispatch personnel to answer and dispatch a call in a timely manner, no matter how you slice it, it's not worth it!

The same programming holds especially true for landline E911 callers by location in Slide 9. Those numbers in the call center jurisdiction can be programmed by address and number in to the ANI (Automatic Number Identification) database with all caller and location information for a quicker response. This is being practiced today by Homer, Seward, and Kenai.

Redundancy for Homer Resources: SPSCC would have to provide you with a detailed plan for connecting to all of your radio systems, tsunami warning systems, local harbor channel, Marine 16, and other conventional resources that Homer uses and what about Public Works? Other city departments? The problem is with one PSAP and limited personnel and technology resources 75 miles away, if SPSCC loses connectivity to dispatch to Anchor Point to page them out on their repeater up on Diamond Ridge, what happens then? Remember no paging can be done over ALMR!

So SPSCC needs a specific line connected to a specific repeater to do this, like they would for Homer, Seward, and Kenai. Specific dedicated phone lines are required to go from SPSCC to each specific repeater in the muni so Homer would require at least 6 dedicated copper circuits to Homer from Soldotna SPSCC dispatch consoles. What if those lines go down? They would use ALMR for voice maybe if it's not down, or maybe call Bob Painter's cell phone? Homer needs to know how redundancy for your local resources is going to be handled, constructed, and redundant to









insure YOUR jurisdiction and the response within it is not compromised. This requires detailed technical support and planning by all parties.

Slide 10 – Service Improvements from Area-wide CAD/RMS could be realized. Seward and Homer do not use any CAD (Computer Aided Dispatch) and Records Management system. Kenai does so CAD information can only be "Standardized" if there are no other PSAPs using CAD or the KPB Brand of CAD from New World. To standardize will take other CAD at Kenai out of service. There are delays in transferring calls due to errors in Soldotna and lack of proper call distribution for E911. Sometimes Soldotna transfers their own 911 calls to Homer, Kenai, etc., due to stressful conditions on the job. These descriptions and statements could be achieved but it would take a lot of time and money to do this right. I see no evidence of detailed plans to support this consolidation effort.

Summary: I see no reference to APCO Standards for communications systems (Association of Public Safety Communications Officials) or NENA (National Emergency Number Association) standards for E911 both of which Tammy Goggia at Soldotna is the Alaska Chapter President. I am the APCO/NENA Commercial Advisor for Alaska for technical details and standards. These standards along with ISO compliance (International Organization for Standardization) along with vendor maintenance agreements to keep all systems and services running is paramount but I see no evidence or mention of these Industry Standards or applications. Soldotna does not pay to maintain their current dispatch center using any contracts for their radio or console system. I cannot speak about the rest of the vendors. What would they do in the future then to ensure the highest Service Level Agreements.

There is no mention of backup or redundancy in the case of emergency, and it is not a good idea to consolidate 4 – PSAPs in to one location with no backup or redundancy plans from other entities and if you don't follow standards and plan for maintenance which was not in the numbers. Consolidation may be a good idea









for cost savings, but the plan must contain much more detail to make it a palatable reality. Each community has unique local situational awareness because of their presence in the community and personal knowledge of people and property, roads, and dangers. Who will do detention, how is that handled, animal control, the public window, traffic fines and payments, and the list goes on and on. If you were to consolidate, how would those services be addressed. Who would dispatch for Kachemak City, Seldovia, Port Graham backup for air transport, and Nanwalek? There is much more to discover.

The cost justification numbers are wrong for cost evaluation when grant funds are used in the equation. Much more detail is needed for APCO, NENA, and ISO compliance to even consider all the costs, plus the costs of additional technology that the KPB SPSCC would have to spend and the additional personnel they would have to hire and the cost of equipment yet to be identified, they would have to maintain. Then how would you put a price or a value on each community for each PSAP that they would want to shut down. That's the greatest cost of all.

Gary Peters – Founder, Pres & CEO, ProComm Alaska, LLC.





