



CITY OF KIRKLAND

Department of Public Works
123 Fifth Avenue, Kirkland, WA 98033 425.587.3809
www.kirklandwa.us

MEMORANDUM

To: Kurt Triplett, City Manager

From: Public Safety Building Executive Steering Committee
David Snider, PE, Capital Projects Manager

Date: March 20, 2014

Subject: Public Safety Building Project

RECOMMENDATION:

It is recommended that City Council receives a status update on the progress of the ongoing construction for the Public Safety Building (PSB). It is also recommended that City Council approve the official name of *Kirkland Justice Center* for the new facility.

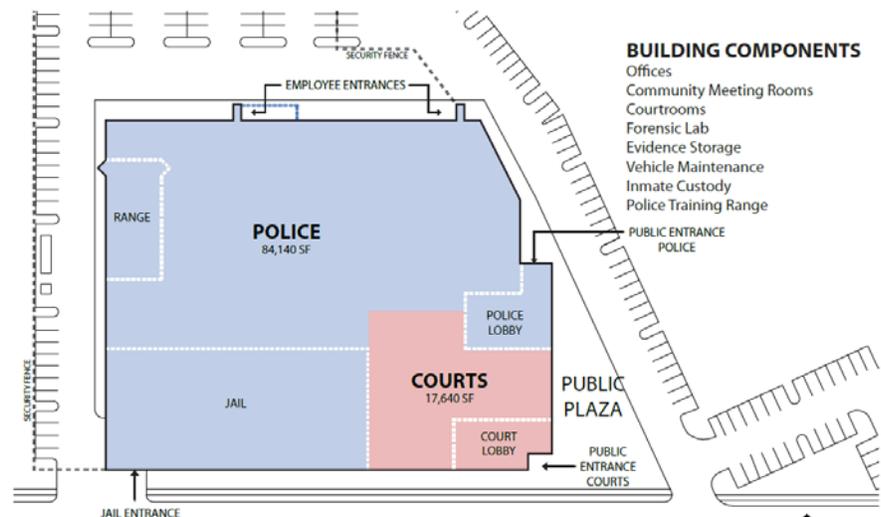
BACKGROUND AND DISCUSSION:

As originally designed and advertised for contractor bids, the PSB consists of nearly 102,000 square feet of interior space. Within that area is 18,000 square feet dedicated to the Court with two large courtrooms, one smaller courtroom, a public meeting space, a lobby and staff offices. The Police Department area includes 84,000 square feet for office and future growth area, a 55-bed jail, an area for tactical training, a firing range shell, a forensic lab, evidence processing, and a "commons" room as a Court and Police staff lunch room and break-out meeting area.

The PSB Project was first advertised for bids on March 6, 2013, including a base bid with four separate additive alternates for Heating and Ventilation Controls, an increased bed capacity for the Jail, a fully completed Police firing range, and expanding the amount of exposed ceiling structure to be painted.

At their regular meeting of May 7, 2013, City Council awarded the contract for the PSB construction to

Cornerstone General Contractors, Inc., Bothell, WA, in the amount of \$23,478,500, including \$22,805,566 for the Base Bid plus two additive alternates.



CITY OF KIRKLAND PUBLIC SAFETY BUILDING
THE MILLER HULL PARTNERSHIP, ARCHITECT
MCCLAREN, WILSON & LAWRIE, POLICE FACILITY CONSULTANT

FLOOR PLAN

At the bid opening, the lowest bid price received exceeded the engineer's estimate and, concurrent with the award, City Council approved an increase in the overall Project budget needed to fund the base scope of work and the additive alternate for HVAC; at that same meeting City Council (by a second motion) also approved an additional budget increase to also fund an expanded ceiling paint alternate. As outlined in the May 7 contract award memo (Attachment A), the additional funding for the budget increase needed to award the contract came from sources including design engineering contingency savings, Build America Bond interest, and REET 1 Reserves.

The physical construction for the Project began on May 20, 2013, and has continued to progress well over the past 10-months. At their regular meeting of November 6, 2013, City Council received a Project status update together with an authorization request for funding to complete the Police Firing Range. At that meeting, City Council was informed how, concurrent with the on-going building construction, Kirkland Police Department staff sought internal and external funding to complete the firing range as the Police Chief had identified that task as one of his top operational priorities. Those efforts included research on the costs for external training, including overtime costs, travel time impacts on officers, as outlined in an accompanying memo (Attachment B), as well as the outreach effort directed towards other area law enforcement agencies in an effort to determine the level of interest in external funding assistance. As a result of that outreach, it was determined that conditions had changed making it advantageous for staff to recommend City Council approval for moving forward with completing the full scope of work for the Range.

The primary rationale behind staff's recommendation for Council's approval included renewed interest by the King County Sheriff's Office (KCSO) to contribute funding in exchange for use of the range, together with the availability of significant one-time funding from under-expenditures in the 2013 Kirkland Police Department budget, and the cost differential between constructing the range during the current active project versus as a separate project in the future. As Construction Contract Change Order Number 2, City Council had previously authorized \$160,000 to complete additional structural ceiling elements associated with the shell of the firing range, and the contractor had provided a proposal to complete the scope of work for an additional \$1.12 million. Staff is continuing negotiations with KCSO to arrive at an agreement for use of the facility to provide the remaining \$200,000 in funding needed to complete the range. Other police departments have also expressed interest in leasing range time, so there are other opportunities for revenue-generating partnerships if an agreement with King County is not reached.

Construction Progress Update

All significant building structural and systems work activities included in the construction contract are substantially complete at this time. Activities still in progress at this time include the interior finishes (flooring, wall covering, and paint) and site finishes (paving, concrete, and parking lot striping). Also in progress is the build-out of the firing range, now set for a July 2014 completion.

Schedule

With a May 20, 2013 start date, the Project's substantial completion date was set for April 22, 2014. The Contractor has kept the Construction Management (CM) Team informed on their progress and through an accumulation of minor delays, primarily due to weather, coordination with power and communications utilities, and certain material delivery delays, the contractor is currently six working days behind schedule. These delays have been documented and approved by the CM Team, and the anticipated completion date for Temporary Certificate

of Occupancy (TCO) issued on all areas of the building, except the firing range, is now April 30, 2014. All systems are progressing, and the target date for placement of all equipment and furniture during the month of May remains on track as originally scheduled. The final Certificate of Occupancy will occur in early June with move-in and a fully operational facility for all occupants now set for July.

Schedule of Major Work Activities																
Activity	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	
Mobilization	█															
Submittals	█	█	█	█	█	█	█	█	█							
Demo & Abatement	█	█	█	█	█	█	█	█								
Earthwork&Utilities	█	█	█	█	█	█										
Site Finishes			█	█	█	█	█	█	█	█	█	█	█	█	█	
Structure		█	█	█	█	█	█	█								
Enclosure				█	█	█	█	█	█							
Roofing & Skylights				█	█	█	█	█								
Interior Rough In					█	█	█	█	█	█						
Interior Finishes						█	█	█	█	█	█	█	█	█	█	
Commissioning&Closeout										█	█	█	█	█	█	
Furniture/Equipment Move-in													█	█	█	
Firing Range Build Out								█	█	█	█	█	█	█	█	

Budget

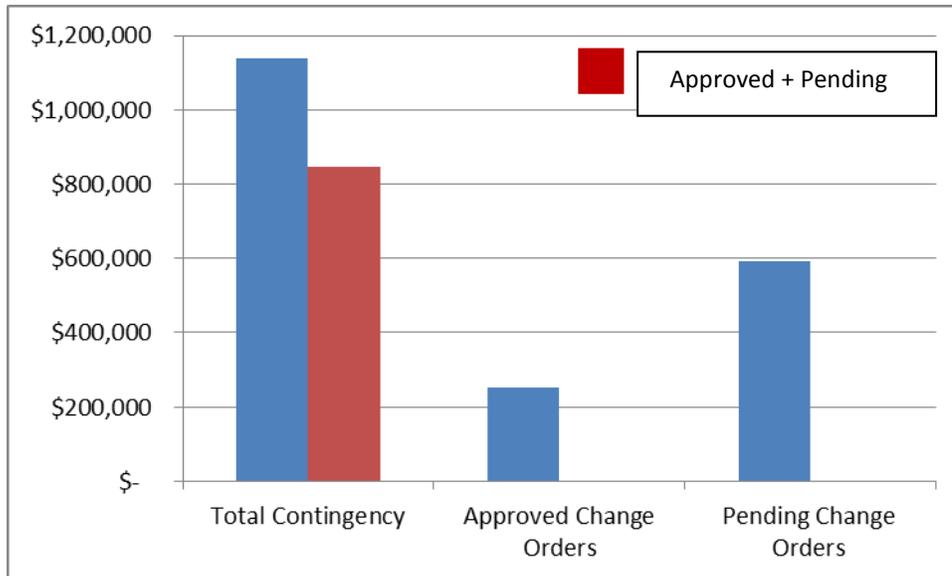
The Project expenditures continue to progress within the available contingency. The construction contingency budget set for this Project was \$1,139,402. To date the approved change orders total \$253,421 (excluding Change Order 2 for the additional firing range ceiling structural add and Change Order 6 for the Firing Range build out, both of which were approved by City Council in 2013 with additional funds from sources that are separate from construction contingency funds). Currently identified and estimated on a pending change order list is an additional \$593,000 in anticipated additional costs.

To date the approved change orders represent only 1.08% of the construction contract while the combination of the approved and pending account for 3.6% of the construction contract amount. Both amounts are well within industry standards for Design-Bid-Build "hard bid" public works projects. The normal change order percentage range is 3% for an excellent project to 8% on the high end of acceptable.

Excluding the two change orders for the Firing Range, the other approved change orders (6 total), plus pending (3 total) change orders break down into the following percentages:

Category	% Approved	% Pending	% TOTAL
Unforeseen Conditions	0.44	0.53	0.97
Design Coordination *	0.54	1.37	1.91
Owner Initiated	0.10 **	0.62	0.72
TOTAL	1.08	2.53	3.60

* Design Coordination refers to gaps or interpretation of the plans and specs
 ** Excluding the addition for the firing range structure



Currently, approximately 26% of the established contingency budget remains available and, as a result, the Project is considered to be “on-budget” at this time.

Upcoming Milestones and Work Tasks

The next major milestone in the construction schedule is Substantial Completion, now scheduled for April 30, 2014. The City staff team is actively working on the purchase of the required furnishings, fixtures, and equipment and the integration planning toward the ultimate relocation of the Municipal Court and Police functions.

Grand Opening and Community Celebration

Staff is currently busy planning the facility’s Grand Opening Celebration for Saturday, May 31, 2014. Current and past City Council members and local dignitaries, staff, friends and family members will be given an opportunity to tour the facility between 10:00 a.m. and noon. At 1:00 p.m., the Grand Opening ceremony for the general public will begin with the Police Department Honor Guard, speeches and the official ribbon cutting. Informational exhibits will be on display with guided building tours being conducted until 4:00 p.m. Event information will be posted to the city website at www.kirklandwa.gov/publicsafetybuilding, included in the March City Newsletter and announced in a News Release.

Official Building Name

The name *Public Safety Building* has been used for the past four years on all materials, briefings and documents, yet the City Council has never officially designated the name of the building. In early 2013 there was a brief discussion with the Public Safety Committee on choosing a formal name for the PSB. At that time the Committee did not feel strongly about changing the name and felt it was more important to focus on completing the building on time and on budget. Staff agreed and the issue was deferred. Since then there have been a few additional conversations about the name at the PSB Steering Team staff meetings; however, no formal proposal was ever made. As the grand opening approaches, the City Manager felt it was important to ask the question more formally, as there are new Council members who were not involved in the original discussions, and the matter of choosing a final/formal name has never been officially presented to the full City Council.

The main reason to consider a name change is because the title "Public Safety Building" is somewhat generic and may not immediately create an image for the public of a building with Courts, Police, and jail facilities. In addition, when the City uses the term "public safety" it often is used to describe a much broader set of services including fire and emergency medical services, as well as traffic safety and pedestrian safety, none of which will be located in this building. As the building nears completion, street signs, websites and other way finding materials need to be developed to direct the public to the new building. The building itself will be clearly signed for both Court and Police entrances as illustrated above in the architect's rendition. However, the staff felt a more descriptive name in all other materials, communications and signage would better serve the citizens in locating the building and understanding its key functions.



The staff developed several alternative name proposals after considering whether public outreach on the name would be helpful. The team concluded there are not many different ways to name a combined Court, Police and jail building and so a decision by the Council with input from the key tenants of the building might be sufficient. If the Council prefers a public outreach process prior to making a decision, that can be accomplished. Staff evaluated several different names and presented them to the Public Safety Committee at its March 20 Committee meeting. Those names included:

- Kirkland Police and Municipal Court Building
- Kirkland Police and Court Building
- Kirkland Justice Center
- Kirkland Law and Justice Center

The three members of the Public Safety Committee were in attendance, as were the Police Chief, Fire Chief, Court Administrator, City Manager, Deputy City Manager, Finance Director

and other high ranking staff. Kirkland Municipal Court Judge Michael Lambo was not able to attend but received the options ahead of time and was supportive of a change. All parties concluded that a name change was appropriate, and that shorter was better. The consensus of the group, and the recommendation of the Public Safety Committee, is to officially adopt the name ***Kirkland Justice Center***.

Staff recommends that the City Council reviews the potential names and selects from the following options:

- 1) Approves ***Kirkland Justice Center*** as the formal name for the new facility by motion;
- 2) Approves ***Public Safety Building*** as the formal name for the new facility by motion;
- 3) Approves an alternative name as the formal name for the new facility by motion.

Once the Council adopts an official name on April 1st, all new materials, documents, communications and signage will be updated to reflect the new name from that point forward.

Attachment A – April Award Memo

Attachment B – Police Firing Range Justification Memo

**CITY OF KIRKLAND**

Department of Public Works

123 Fifth Avenue, Kirkland, WA 98033 425.587.3809

www.kirklandwa.us

MEMORANDUM

To: Kurt Triplett, City Manager

From: Public Safety Building Executive Steering Committee

Date: April 25, 2013

Subject: Public Safety Building Project – Award Construction Contract

RECOMMENDATION:

It is recommended that the City Council awards the Public Safety Building Project construction contract to Cornerstone General Contractors Inc. of Bothell, WA in the amount of \$23,401,027 and authorize an increase in the project budget of \$451,619 to fund the base scope of work.

The Council may also wish to consider authorizing an additional increase of \$77,473 from REET 1 reserves to fund the expanded ceiling paint alternate in the construction contract.

BACKGROUND AND DISCUSSION:

The design phase of the Public Safety Building (PSB) project was complete at the end of February, 2013. The PSB project was first advertised for bids on March 6, 2013 complete with Supplemental Bidder Responsibility Criteria specific to completion of projects of similar size and scope. At this time of bid advertisement, the engineer's estimated total project cost was \$41,543,107 including a construction estimate of \$22,940,250. With previously approved funding of \$41,552,265, there was a remaining budget balance of \$9,158 left.

The bid opening was held April 5, 2013 with five bids received. The low bid was determined by the base bid amount; however heating, ventilation and air conditioning (HVAC) controls were bid separately as Alternates 5a, 5b and 5c; one of these three alternates must be included in the contract.

Current City facilities use Delta brand HVAC controls. In order to provide a competitive bid and maintain the ability to select a preferred supplier, the bids for HVAC controls were separated from the base bid. Three HVAC suppliers were identified to provide bids and the preferred supplier (Delta) provided the low bid. The base bid combined with the selected bid for HVAC controls (Contract Amount) is as follows:

Contractor	Base Bid	HVAC Control	Contract Amount
Construction Estimate	\$22,512,047.00	\$428,203.00	\$22,940,250.00
Cornerstone General Contractors Inc.	\$22,805,566.00	\$595,461.00	\$23,401,027.00
Construction Services Inc.	\$23,022,375.00	\$492,750.00	\$23,515,125.00
Berschauer Phillips	\$23,245,918.00	\$612,036.02	\$23,857,954.02
Allied Construction	\$23,323,500.00	\$657,000.00	\$23,980,500.00
Pease Construction	\$24,288,096.00	\$603,498.30	\$24,891,594.30

The low bid contract amount for the construction contract is \$23,401,027 and exceeds the engineer's estimate by \$460,777. With a total budget surplus of \$9,158 prior to opening bids a budget shortfall of \$451,619 now exists.

Staff recommends the following funding options to re-balance the budget:

The design and engineering phase is nearing completion, so it is appropriate to reduce the contingency for this phase from \$189,508 to \$50,000, offsetting \$139,508 of the professional services overage.	\$139,508
Interest earnings on the unspent Build America Bond proceeds have exceeded the projected amount. An additional \$130,553 is available to be used toward the project.	\$130,553
After the changes described above, a balance of \$181,558 remains, which is proposed to be funded using REET 1 reserves.	\$181,558
Total	\$451,619

At the April 18th Public Safety Committee meeting, interest was expressed in exploring options for funding the increased jail capacity alternate and the expanded ceiling paint alternate. The most logical funding source for these two alternatives is from the REET 1 reserve, which does have a healthy fund balance of over \$3 million. Staff does not recommend pursuing either one of these alternates as they were originally only intended to be funded if bids came in lower than the engineer's estimate. Additionally, analysis shows that there is no immediate Kirkland need to expand the jail size beyond 55 beds. The attached memo explains the current demand for jail beds in the region. (Attachment A).

At the same April 18th Public Safety Committee meeting, the question of how much more will it cost to construct the jail expansion at a later date was raised. Staff has reviewed the scope of work to complete the jail expansion at a later date. All work below the concrete slab is included in the current base scope of work for the project and the electrical and HVAC systems are sized to accommodate the jail expansion. This limits the amount of additional demolition and coordination with the buildings existing systems. The main cost increase to complete the work at a later date is the re-mobilization cost. 15% of the current construction cost of \$561,516 is estimated for re-mobilization.

The table below summarizes the cost to complete the jail expansion work at a later date in today's dollars.

Current bid amount for the jail expansion alternate	\$561,516
15% for re-mobilization	\$84,230
Total	\$645,746

Depending on when the work is completed additional cost associated with price escalation are expected. Including escalation, the jail expansion cost is expected to range from \$645,746 to \$730,000 if the work is completed within the next five years. Despite these potential cost increases, staff is not recommending completing the jail expansion at this time, given the lack of immediate need, the many jail bed options in the region and the potential opportunity cost of using significant REET 1 reserves while the City is implementing many capital projects.

However, the \$77,473 expanded ceiling paint alternative is substantially less than the jail alternative. If Council should choose to include this alternate in the construction contract, the funding requirement from REET 1 reserves would increase by \$77,473. Adequate funds within the REET 1 reserve exist to accomplish this alternate. A separate fiscal note is attached for Council consideration.

With an award of the contract by City Council at their May 7, 2013 meeting, construction will begin in May, 2013. A ground breaking ceremony is scheduled for Friday May 17th. An eleven month construction period is anticipated with an additional two months to complete punchlist items, close out and move in. Occupancy is expected at the end of June, 2014.

With design and bidding complete, staff has the design information to begin the procurement of furnishings and equipment for the building. To the extent possible, existing furnishings from Court and Police will be used. A list of required equipment and furnishings is currently being developed that identifies long lead items for early procurement.

The public art process is also underway. Staff has hired Perri Howard and Leslie Bain to coordinate the public art process. City representatives from the Police Department and Court, as well as representatives from the Kirkland Arts Commission, have met, toured local facilities with public art and are in the process of selecting artists. Staff will report back to Council this summer with an update to introduce the artists and their concepts.

- Attachment A: Jail Capacity Memo
- Attachment B: Fiscal Note – Base scope of work
- Attachment C: Fiscal Note – Including Ceiling Paint Alternate

**CITY OF KIRKLAND****Police Department**

123 Fifth Avenue, Kirkland, WA 98033 425.587.3400

www.kirklandwa.gov

MEMORANDUM

To: Eric Olsen, Chief of Police

From: Michael Ursino, Administrative Captain
Hiedi Popochock, Police Senior Financial Analyst

Date: October 16, 2013

Subject: Public Safety Building Firing Range Needs Assessment

PURPOSE

This memo will address the needs and uses of the proposed range for the Public Safety Building.

BACKGROUND ON NEED

The Kirkland Police Department (KPD) currently has 114 commissioned and non-commissioned officers that are armed with a firearm. It is imperative that officers maintain department firearm training standards and stay current on firearm safety. In order for officers to maintain department firearm training standards, officers have to successfully complete a series of qualification exercises that are conducted a minimum of twice a year. KPD currently utilizes three firing range facilities to conduct qualification exercises. The majority of the qualification exercises occur at the Issaquah Police Department (IPD) firing range. When the IPD firing range is not available, the department utilizes two private firing ranges. The private firing ranges are utilized mainly for remedial training and for firearms practice for off-duty officers.

Failing to train is an issue in law enforcement that has been addressed at many different levels, for many different reasons. Deadly force is one of those reasons. When it comes to firearms training no court has made a specific decision on the frequency of training, however, they have addressed the substance of the training. The minimum training mentioned above is the standard set by KPD General Orders and Procedures. The International Association of Law Enforcement Firearms Instructors (IALEFI), is that body of professional firearms trainers who've set the level of training as quarterly for good reason; "The learning curve required for the psychomotor skills needed for semiautomatic pistol manipulation is such that without constant and frequent reinforcement, those skills will deteriorate".¹ The International Association of Chiefs of Police (IACP), have suggested that firearms training should preferably be held three times a year, and have suggested that annual, or even semi-annual, firearms training is insufficient for the purposes of avoiding liability.²

¹ International Association of Law Enforcement Firearms Instructors – Training Standards (2004 Revision)

² International Association of Chiefs of Police Model Deadly Force Policy (2001)

Training does not simply mean point the weapon down range and pull the trigger. In addition to classroom instruction of deadly force policy and procedure and other topics, most trainers suggest the range instruction should include:

- Clearing stoppages with either hand
- Drills that simulate malfunctions
- Emergency tactical reloading with either hand
- Manipulation of safeties and de-cocking levers with either hand
- Low-light and judgmental (decision-making) shooting
- Shooting while moving to cover
- One-handed firing
- Giving verbal challenges
- Firing and clearing malfunctions from various "officer down" positions
- Engaging multiple targets

Qualifications conducted by KPD include all of the above topics. If an officer has an issue with any of them further training needs to be conducted. Although not all of the training would require a range, the advantage of live fire practice cannot be replaced with simulation.

A significant amount of range time is also needed for the National Integrated Ballistic Information Network (NIBIN) Program, which is managed by the United States Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). To use NIBIN, firearms examiners or technicians enter cartridge casing evidence into the Integrated Ballistic Identification System (IBIS). These images are correlated against the database. Law enforcement can search against evidence from their jurisdiction, neighboring agencies, and others across the country. Currently, the weapons are given to instructors on range days to fire and collect the casings. The backlog of weapons to be tested continues to increase due to limited access to firing range facilities. It is absolutely imperative that KPD catches up on submitting evidence of firearms.

In the past three years, KPD has spent approximately \$25K-\$28K annually for firing range rental fees and personnel overtime to conduct only qualification exercises. At a minimum, 684 hours are used for qualification exercises annually. It is anticipated that the instructor overtime will be eliminated with access to a 24 hour facility. Other uses include:

- Remedial training
- Monthly officer practice
- Scenario based training
- Special Response Team Training
- Make-up training days
- Pre-academy qualifications
- Instructor development
- Less lethal training
- NIBIN program testing

DISCUSSION ON NEED

There are several issues that surround qualifying and training 114 officers twice a year at different firing range facilities.

- Cost of range rental
- Cost of overtime for instructors
- Availability of officers/training
- Availability of range rental
- Travel time for officers

Cost of Range Rental

From 2010 to 2012, KPD has spent a total of **\$46,279** in firing range rental fees. Officers have access to private firing range facilities for practice and remedial training, if needed. We have utilized two firing range facilities in Bellevue and one firing range facility in Everett. The department encourages officers to practice once a month by supplying fifty rounds of ammunition to officers. The table below illustrates a breakdown of range rental fees for the past three years.

Range Rental Costs	
Year	Expenditures
2010	\$14,385
2011	\$16,119
2012	\$15,775 ¹

¹Only one qualification exercise was conducted in 2012 due to lack of range availability.

Availability of Range Rental

The limited range rental availability has forced KPD to pay the firearm instructors overtime in order to administer the mandatory qualification exercises. There have been several instances where the available days for the firing ranges did not coincide with the on-duty firearm instructors' schedules. This problem was further compounded when additional officers were added for annexation starting in 2010. In 2014, the new Kirkland Jail at the Public Safety Building will add three new non-commissioned officers that will have to complete the training and qualification exercises.

In late 2012, the IPD firing range was closed for six months for repairs and maintenance. The police department was tasked with qualifying 114 commissioned and non-commissioned officers at two private firing ranges. The limited flexibility in the hours of operation for the two firing ranges resulted in one of the two annual qualification exercises to be cancelled. The police department did not meet the annual firearm training standard.

Cost of Overtime for Instructors

Instructor overtime has increased significantly due to the limited firing range availability and the number of officers to qualify. The table below illustrates instructor overtime costs from 2010 to 2012 totaling **\$31,200**.

Firearm Instructor Overtime Costs	
Year	Expenditures
2010	\$10,620
2011	\$11,743
2012	\$8,836 ¹

¹Only one qualification exercise was conducted in 2012 due to lack of range availability.

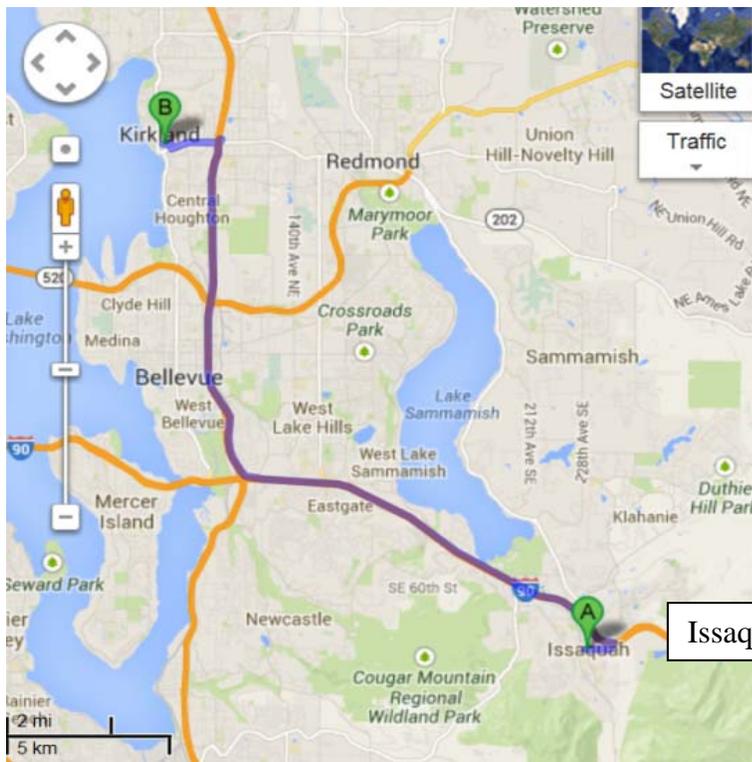
Availability of Officers

Currently the average patrol staffing for a 12 hour period is between 10.5 and 11 officers per shift. KPD allows three officers to qualify at a time. If at all possible an on duty instructor is used for the day, to eliminate the overtime. Four of the on duty staff are out of the city for approximately three hours in order to complete the qualification exercise. Depending on which range is utilized the officers can take between 20 and 30 minutes to respond to an emergency. This not only slows down the response time considerably but a makeup day on the range will now have to be scheduled resulting in additional costs. There are always make-up days for each qualification, again relying on the availability of a facility, instructor and the officer. The above figures cover all make-up days that were necessary to complete a qualification.

Completing a firing range in the Public Safety Building would not only create efficiencies and reduce costs, it will also create opportunities to conduct real life scenario based trainings that increase officer safety, effectiveness and reduced City liability. The current configuration will allow for 180 degree shooting at a moving target. Vehicles can be moved onto the range allowing officers to shoot from a seated position or around the hood of a car. All of this being done while the emergency lights are activated creating an atmosphere as close to reality as possible.

Travel Time for Officers

Travel time was also calculated from 2010 through 2012. Allowing each armed officer an hour of total commute time (round-trip), 234 hours of time each year was spent commuting between the IPD firing range, Sam's Gun Shop in Everett and/or Wade's Gun Shop in Bellevue. The 2012 mid-point base hourly rate for a patrol officer was approximately \$35.00. An estimated total of **\$8,190** was spent each year just on travel time and \$24,570 cumulatively over the last three years. This figure includes two round trips per armed officer in 2010 and 2011 and one round trip in 2012.



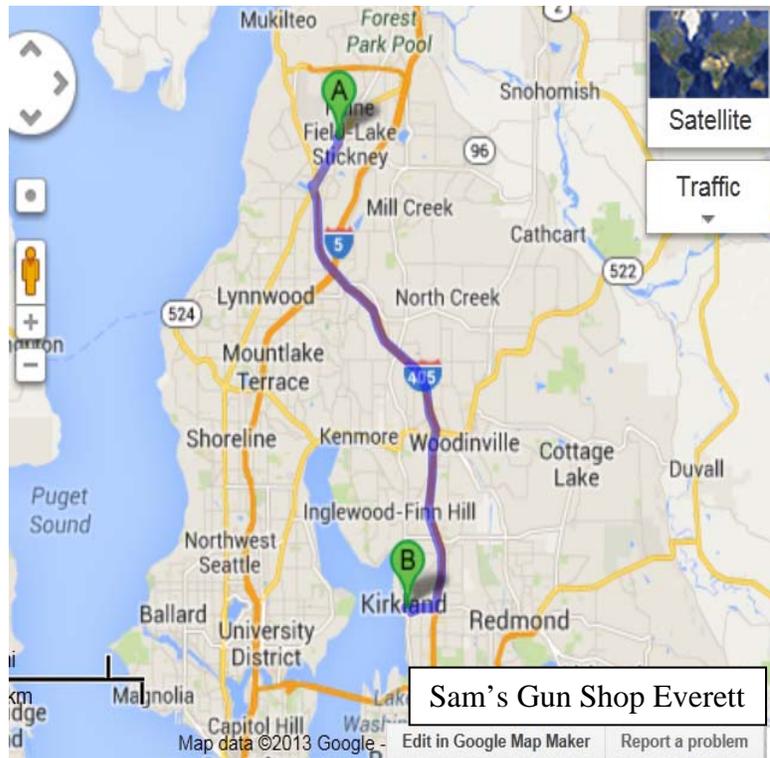
Even operating in a code response from the Issaquah range the congested traffic corridor of I-90 W and I-405 N presents challenges of it's own.

- Increased liability
- Grid lock

I-90 W and I-405 N 17.1 mi, 22 mins
● In current traffic: 23 mins

Responding from Sam's gun shop in Everett has similar issues to the I-90 corridor. The response time is about the same, but the traffic and weather conditions can dictate what the response time will actually be.

I-405 S 18.1 mi, 22 mins
● In current traffic: 23 mins



BACKGROUND ON USE

Although the new firing range has not been identified as a revenue source, it has the potential to be rented-out by surrounding agencies. The hourly rental rate for local firing ranges varies from \$35 to \$48, depending on day or night use. The KPD range could be rented anytime it is not in use by KPD which can provide some cost recovery. For example, KPD spent \$16,119 in range rental fees in 2011. The IPD firing range annual revenue for range rental in 2011 was \$34,100.

Currently several inquiries have been made by local Law Enforcement Agencies requesting use of the KPD range. Discussions are ongoing focusing on one time capital money and/or ongoing rental fees.

DISCUSSION ON USE

There are issues surrounding the use of a range at the new Public Safety Building that are discussed below.

- Type of range
- Cost of range operations
- Operation of range

Type of Range

There are basically two types of ranges available, leaded and lead-free. The type of range that has been identified by the consultant as the most appropriate for the Public Safety Building is a lead free system, (McClaren, Wilson & Lawrie, Inc.). Although lead-free ammunition is more expensive the maintenance of a leaded filtering system can be very costly. The firing range bid is based on a lead-free range and is controlled mostly by the type of ammunition.

- **Ammunition:** The significant source of particulate lead in an indoor range is the ammunition used. Lead-free ammunition is mandatory in a lead-free range and therefore must be controlled.

By changing the projectile to a totally encapsulated copper jacketed round produces a 97% reduction in lead particulate when compared to using solid lead bullets. The use of both lead-free primers and totally encapsulated projectiles results in airborne lead being totally eliminated at the firing line and breathing zone. Reliable non-lead primers and projectiles are becoming the standard and continue to get better. The bottom line is lead-free ammunition is mandatory.

Although lacking in functionality, years ago, lead-free ammunition, (The Green Ammunition), has greatly improved over the past five years and can simulate a duty round. In recent months, it has been difficult to find duty ammunition. This is directly attributed to the increased demand of the military. As imagined, supply and demand has inflated the price of the leaded ammunition. Historically, green ammunition would be twice the cost of leaded ammunition. Currently, the cost between the two types of ammunition is not as substantial anymore. The luxury of price shopping has been eliminated further by recent events in the news relating to gun control. KPD purchases leaded ammunition as soon as it is available. Lead-free ammunition is easier to locate and purchase. Currently the costs are about the same.

- **Maintenance:** Most lead-free ranges are maintained the same way. The example given below is pulled from one company that meets the bid specifications needed to complete the project.

The rubber particle trap system needs to be mined periodically to recover the spent bullets that have been fired into them. A typical ten (10) foot high range backstop can accommodate anywhere from 80,000 to 120,000 rounds, per lane, based on the type of shooting, (static or tactical).

In other ranges of this type, mining has occurred anywhere from six to eight years after installation depending on use. The average cost of range mining is about \$150 dollars a linear foot. Based on the configuration of the range, it will cost about \$7,500 to mine.

Another option to the mining companies is to 'self-mine'. Mining the lead-free range is as simple as separating the projectiles from the ballistic rubber pellets. It is recommended that range owners contact firms that are knowledgeable about range technology and best suited for directing the range metals to the appropriate companies for further metal recycling. However, since the range is completely lead-free, the mining of the rounds is not a hazard or difficult because there is nothing to be sorted other than the projectile from the backstop particles.

The maintenance and operation of this range is low and most maintenance can be done utilizing range personnel.

Operation of Range

The KPD firing range will be operated by the Firing Range Master (FRM) which will be a part-time position filled by a current FTE. The FRM will manage the use of the range for KPD and will conduct or arrange the firearm training of officers, detention personnel, and court security in firearm and law enforcement equipment safety. The FRM will also manage the maintenance of the firing range and will maintain the inventory of ammunition and targets. The FRM will have five firearm instructors for assistance. Firearm instructors are full-time officers who provide firearm instruction as an ancillary assignment. KPD will be increasing the number of instructors by three to insure one firearm instructor is available at all times. The State normally conducts a local training for the instructors and costs are \$600 for pistol certification and \$600 for rifle certification. Any instruction in the range by an outside agency will be conducted by a state qualified firearms instructor. This instructor will be given clear direction on the rules and regulations of the range.

The checkout system will be managed much like a rental car program. The Kirkland Police Firing Range Master or his delegate will checkout the range to the agency prior to use and will inspect the range when they have finished.

Range rental to the general public will not be allowed; however, the opportunity to conduct firearms safety classes to the public will be scheduled a few times of year and will be at minimal cost. On-duty firearms instructors will be used eliminating overtime costs. The firing range would also be utilized to enhance the Citizen's Police Academy weapons familiarization segment at no charge.

Cost of Range Operation

- Facility Maintenance Expense includes electricity, light bulb replacement and HVAC service.
 - \$7.62 per sf. @ 4194 sf. = \$87.00 per 24 hour day.
 - Janitorial services will be completed by corrections under the direction of the Range Master or his/her designee.
- Range Master:
 - Added to current duties and absorbed within the current FTE
- Range Equipment Maintenance:
 - TBD
- Range mining is only needed about every couple of years, depending on the use.
 - If needed \$3700.00 per year is a conservative estimate.

Total: Per 24hr. day = \$97.01

Conclusion

As the department grew so did the need for more range time and space. Evaluating current range practice indicated areas of concern, availability and associated costs. Building a range is expensive, however, the costs are mostly fixed and there is opportunity for cost recovery. Control of range space and time is a benefit not realized until a department struggles to find a location that meets the needs of the department, both in cost and availability. In 2012 training

to minimum standards was problematic as the primary range was closed for repair. The results of which were a missed qualification day, instructor and officer overtime and lack of training space.

Training to minimum standards is not ideal for any law enforcement agency. Utilizing a 24/7 facility will insure that officers are trained above a minimum standard, reducing liability for the City while creating a safer environment for officers and the public.