

**Transcript of the Board of Commissioners
Multnomah Building, Board Room 100
501 SE Hawthorne Blvd., Portland, Oregon
Tuesday, October 21, 2014**

BOARD BRIEFING

Chair Deborah Kafoury called the meeting to order at 10:07 a.m. with Vice-Chair Diane McKeel and Commissioners Jules Bailey, Loretta Smith and Judy Shiprack were present.

Also attending was Marina Baker, Assistant Board Clerk.

[THE FOLLOWING TEXT IS THE BYPRODUCT OF THE CLOSED CAPTIONING OF THIS PROGRAM.]

>> Chair Kafoury: GOOD MORNING AND WELCOME TO THE BOARD BRIEFING FOR THE MULTNOMAH COUNTY COMMISSIONERS. WOULD I ALSO LIKE TO SAY WE HAVE SOME DISTINGUISHED GUESTS WITH US THIS MORNING. LEW FREDERICK AND KATHERINE HARRINGTON. THANK YOU FOR JOINING US FOR THIS INFORMATIVE DISCUSSION.

>> GOOD MORNING. BRIAN VINCENT COUNTY ENGINEER. IT'S MY HONOR TO INTRODUCE OUR GUEST SPEAKER, YUMEI WANG OF DEPARTMENT OF OREGON DEPARTMENT OF MINERAL AND GEOLOGY AND MINERAL INDUSTRIES, OR DOGAMI. MS. WANG IS A RECOGNIZED EXPERT IN THE FIELD AND I THINK IT'S A GREAT OPPORTUNITY FOR US TO HEAR DIRECT FROM HER ON HER EXPERIENCE AND SHE'S SPOKEN ON MANY OCCASIONS AND THIS IS A GOOD OPPORTUNITY FOR US TO HEAR DIRECTLY. THE SECOND PRESENTATION WILL BE NOVEMBER 6TH, AND IT WILL BE MORE DETAILED WITH RESPECT TO OUR WILLAMETTE RIVER BRIDGES. SO TODAY'S PRESENTATION IS AN OVERARCHING VIEW OF THE STATE AND THE REGION AND MORE PARTICULARLY ON NOVEMBER 6th, PRESENTED BY STEVE. THESE -- THEY'LL CONTINUE THE FINE WORK YOU'VE ALREADY STARTED. LAST WEEK WE HAD THE GREAT SHAKEOUT IN RECOGNITION OF THE CONCERNS FOR THE AREA. WE'RE DOING WORK IN EMERGENCY MANAGEMENT AND MORE PARTICULARLY WE HAVE AN INCREASED FOCUS IN OUR BRIDGE CAPITAL IMPROVEMENT PLAN THAT WILL BE PRESENTED TO YOU LATER THIS YEAR EARLY NEXT SPRING. MY PLEASURE TO INTRODUCE YUMEI WANG, AND I WILL TURN IT OVER TO HER.

>> GOOD MORNING, EVERYONE. I JUST WANTED TO --

Chair Kafoury: WE HAVE A MICROPHONE FOR YOU.

>> THAT WOULD BE GREAT, I DO BETTER THINKING IF I'M STANDING.

Board Clerk: UNTIL THEN, COULD YOU SPEAK IN THE MICROPHONE SO THE CLOSED CAPTIONING CAN HEAR YOU?

>> I JUST WANTED TO START OUT BY SAYING IT'S -- I'M VERY EXCITED THAT USUAL INTERESTED IN EARTHQUAKE SAFETY, AND PLEASED THAT YOU ASK FOR OUR INPUT. SO I PUT TOGETHER SOME INFORMATION, IT MAY, YOU KNOW, ANSWER SOME QUESTIONS, BUT ALSO RAISE MORE QUESTIONS. SO YOU KNOW, WE'LL SEE HOW THAT GOES. THE NICE THING ABOUT EARTHQUAKES IS THAT THEY REALLY DON'T OCCUR VERY OFTEN. BUT WHEN THEY OCCUR, IT CAN BE QUITE A PROBLEM. SO I START OUT BY SHOWING YOU JUST A COUPLE OF SLIDES. THE UPPER SLIDE SHOWS THE CHRISTCHURCH EARTHQUAKE THAT OCCURRED IN 2011, AND THAT -- WHAT YOU SEE THERE IS A DUST OF CONCRETE SMOKE. IT'S FROM CONCRETE BUILDINGS THAT ARE COLLAPSING. SO THAT'S A CLOUD OF CONCRETE DUST IS WHAT I MEANT TO SAY. AND BELOW THAT IS FROM THE 2011 JAPAN EARTHQUAKE, AND THAT'S THE TSUNAMI COMING IN WHERE IT SHOULDN'T BE, A BUNCH OF HOUSES AND SUCH THERE. SO WHAT I PLAN TO TALK ABOUT TODAY IS REALLY JUST THREE THINGS. YES, WE'RE DEFINITE -- WE'RE DEFINITELY IN AN AREA WHERE WE HAVE EARTHQUAKES, AND WE DO HAVE A LOT OF SEISMIC VULNERABILITIES. I'LL TALK A LITTLE BIT ABOUT THE BUILDINGS, THE GROUND THAT'S SUSCEPTIBLE TO LANDSLIDING, AND THAT IT CAN CAUSE A LOT OF OUTAGES TO OUR LIFELINES. SO PROBLEMS IN OUR TRANSPORTATION, OUR WATER, OUR FUEL SUPPLY AND SO FORTH. AND THEN TALK ABOUT THE NEED TO GET BETTER PREPARED IF WE'RE EXPECTING TO DO WELL AFTER A BIG EARTHQUAKE. AND SHOW YOU SOME EXAMPLES. SO WE DIDN'T KNOW VERY MUCH ABOUT EARTHQUAKES, HUNDREDS AND THOUSANDS OF YEARS AGO. BUT -- WE USED TO THINK EARTHQUAKES WERE CAUSED BY CREATURES, WE KNOW NOW THAT THERE'S PLATE TECTONICS RELATED TO EARTHQUAKES. IN OUR AREA HERE WE -- IN 1980 WITH MOUNT ST. HELENS ERUPTING, STILL DIDN'T KNOW THAT WE WERE AT AN EARTHQUAKE RISK. GEOLOGISTS WERE PUTTING THEMSELVES ON THE BACK SAYING WE MIGHT HAVE VOLCANOS, BUT WE DON'T HAVE EARTHQUAKES. AND THAT JUST ISN'T TRUE. IF YOU LOOK AT THIS SLIDE ON THE LEFT, YOU CAN SEE KIND OF THE RING OF FIRE THE OUTLINE OF THE PACIFIC PLATE, AND SOME OTHER PLATES, AND THE PINK BAND IS WHERE YOU HAVE A CONCENTRATION OF EARTHQUAKES AND VOLCANOS. AND THEN ON THE RIGHT YOU HAVE IMAGE OF THE BIG FAULT THAT WE HAVE RIGHT OFFSHORE, WHICH IS A PLATE BOUNDARY FAULT, CALLED THE CASCADIA SUBDUCTION ZONE. AND IT STRETCHES FROM NORTHERN CALIFORNIA TO BRITISH COLUMBIA AND WE KNOW THAT THAT IS ACTIVE, IF THE ENTIRE THING RUPTURED IT WOULD CREATE A MAGNITUDE 9 TWO.2. IF PART OF IT RUPTURED IT WOULD BE SMALLER. IT RECURS ABOUT EVERY 500 YEARS, THE ENTIRE RUPTURE, THE SOUTHERN SEGMENT RECURS EVERY 250 YEARS OR SO. SO THE BIG QUESTIONS ARE WHEN, WHERE, AND HOW BIG, AND WE REALLY CAN'T PROVIDE ANY PRECISE INFORMATION ON THAT, BUT WE DO KNOW THAT THE CASCADIA FAULT, WE KNOW WHERE IT IS, AND IT CAN GENERATE A BIG EARTHQUAKE, AND THAT IT CAN OCCUR ANY TIME. IN THE GEOLOGIC TIME FRAME IT'S LIKE NINE MONTHS PREGNANT, THE LAST ONE WAS JANUARY 26th, 1700, THERE'S AN INTERESTING GEOLOGIC STORY OF HOW THAT EXACT DATE WAS DETERMINED. IF YOU LOOK AT THAT TIME LINE UP THERE, EVERY RED --

LITTLE RED TICK IS A MAGNITUDE 8 EARTHQUAKE OR THEREABOUTS, AND EVERY BIGGER RED TICK IS MAGNITUDE 9-ISH SIZE EARTHQUAKE. SO OVER THE PAST 10,000 YEARS THESE THINGS HAVE BEEN GOING OFF LIKE CLOCKWORK IN GEOLOGIC TIME. IT'S NOT LIKE WE'RE GOING TO GET AWAY WITH NOT HAVING ONE, IT'S JUST PART OF NATURE, IT'S DEFINITELY GOING TO HAPPEN. IF YOU TAKE A LOOK AT A CROSS-SECTION, YOU CAN SEE THAT THE OCEANIC PLATE IS GETTING SHOVED UNDER THE NORTH AMERICAN PLATE AND AT THE EASTERN END OF IT, WHERE IT'S NOT CAPABLE OF GENERATING AN EARTHQUAKE, IT ACTUALLY GETS SO DEEP AND HOT IT MELTS AND IT COMES UP AS VOLCANOS. SO IF YOU LOOK AT OUR LINE OF VOLCANOS STRETCHING FROM NORTHERN CALIFORNIA UP TO BRITISH COLUMBIA, THAT'S THE VERY EASTERN DEMARCATION OF THE FAULT. SO OF THE -- OF THE SUBDUCTING PLATE. SO WITH A BIG EARTHQUAKE, WE WOULD OBVIOUSLY HAVE GROUND SHAKING, BUT WITH THIS TYPE OF EARTHQUAKE YOU ALSO HAVE A TSUNAMI, AND A TSUNAMI IS A SERIES OF WAVES THAT COMES AND INUNDATES THE LOW-LYING PART OF THE COAST, AND WHATEVER IS IN ITS WAY CAN GET DESTROYED. THEY CAN BE QUITE FORCEFUL, ESPECIALLY ON LITTLE WOOD FRAME HOUSES. AND THEN YOU CAN ALSO HAVE A BUNCH OF OTHER HAZARDS, INCLUDING LANDSLIDES, LIQUEFACTION, FIRES, HAZMAT SPILLS AND SO FORTH. WHAT WE EXPECT TO SEE IS EXTREME DAMAGE FROM SHAKING AND THE TSUNAMI RIGHT ALONG THE COAST. AND THEN THAT SHAKING WOULD LESSEN AS YOU GET FARTHER AWAY FROM THE FAULT, BUT THE SHAKING WOULD ALSO BE VERY SIGNIFICANT IN THE PORTLAND AREA. AS YOU GET TO THE CASCADE RANGE AND BEYOND TO THE EAST, WE WOULDN'T EXPECT TO HAVE DAMAGE BY AND LARGE. THERE MIGHT BE SOME ISOLATED CASES. BUT CERTAINLY THE DAMAGE THAT WE HAVE HERE COULD IMPACT OR WOULD IMPACT WHAT GOES ON FARTHER EAST. FOR EXAMPLE, WE GET OUR FUEL DELIVERED TO PORTLAND, AND WE SHIP IT, WE BARGE IT TO THE EAST. THEY WOULD BE CUT OFF FROM THAT FUEL SUPPLY. WE ALSO HAVE FAULTS IN THE PORTLAND AREA. THE PORTLAND HILLS FAULT DEFINES THE PORTLAND HILLS AND THAT ONE IS ACTIVE AS WELL AS A NUMBER OF FAULTS THAT ARE GENERALLY PARALLEL TO THAT FAULT IN THE NORTHWEST DIRECTION. THESE FAULTS, THOUGH THEY'RE ACTIVE, THEY OCCUR ON A LESS REGULAR BASIS. AND SO YOU SEE THE SLIP RATES THERE, THAT INDICATES THAT THEY ARE NOT AS ACTIVE AS THE CASCADIA FAULT. BUT THEY CAN CERTAINLY CAUSE A LOT OF DAMAGE IN MULTNOMAH COUNTY. I WANTED TO SHOW YOU A TIME HISTORY, A COUPLE OF TIME HISTORIES OF EARTHQUAKE SHAKING WITH TIME FROM TWO DIFFERENT TYPES OF EARTHQUAKES. THE CASCADIA STYLE EARTHQUAKE AND THEN THE LOCAL PORTLAND AREA FAULT EARTHQUAKE. AND SHOW YOU THAT THE DURATION OF THE SHAKING IS VERY DIFFERENT BETWEEN THE TWO. THE UPPER ONE IS FROM A MAGNITUDE 8.8 SUBDUCTION ZONE EARTHQUAKE IN CHILE, AND YOU CAN SEE THAT THE SHAKING GOES ON FOR A VERY LONG TIME VERSUS THE MAGNITUDE 6.7 NORTHRIDGE EARTHQUAKE, WHERE THE SHAKING, THE STRONG SHAKING IS ON THE ORDER OF 15 SECONDS. SOMEONE WOULD FEEL THE SHAKING FOR LONGER, BUT OF ENGINEERING SIGNIFICANCE IT ONLY SHAKES FOR 15 SECONDS OR SO. OK. SO NOW THAT WE HAVE ESTABLISHED THAT WE ARE IN AN AREA WHERE WE HAVE ACTIVE FAULTS

AND CAN HAVE -- CAN AND WILL HAVE FUTURE EARTHQUAKES, WE'RE GOING TO TALK A LITTLE BIT ABOUT VULNERABILITIES. THERE ARE MANY IN OUR AREA HERE. STARTING WITH THE BUILDINGS, TO THE GROUND ITSELF, AND TO OUR LIFELINES. LIFELINES MEANING FUEL, NATURAL GAS, WATER, WASTEWATER, TRANSPORTATION, TELECOMMUNICATIONS, ELECTRICITY. WHY DO WE HAVE A HIGH SEISMIC RISK SNITS REALLY BECAUSE GEOLOGISTS, MY COLLEAGUES WERE SLOW IN FIGURING OUT THAT WE WERE IN AN AREA WHERE WE HAVE ACTIVE FAULTS, THEREFORE, THE BUILDING CODES NEVER INCLUDED DESIGNING FOR LATERAL SHAKING. AND EVEN -- THIS IS SCOGGINS DAM OWNED BY THE BUREAU OF RECLAMATION RIGHT IN WASHINGTON COUNTY AT HAGG LAKE WAS BUILT IN THE '70s, AND IT HAS REAL SEISMIC ISSUES. AND WOULD NOT SURVIVE A CASCADIA EARTHQUAKE. SO WHAT YOU SEE HERE ON THE RIGHT AND THE LEFT IS THE BUILDING CODE. THE SEISMIC DESIGN FOR INTEGRATED INTO THE NATIONAL BUILDING CODE. SO 1976, YOU CAN SEE OREGON'S NICE BLANK AREA, IT'S GRAYED OUT, AND WE DIDN'T HAVE ANY SEISMIC CONSIDERATIONS IN OUR BUILDING CODE, AND IN 1994 THE -- IT WAS THE FIRST TIME THAT OREGON STATE BUILDING CODE INCORPORATED THE CASCADIA FAULT INTO ITS DESIGN REQUIREMENTS. SO THAT'S BAD NEWS WITH RESPECT TO MANY OF THE INFRASTRUCTURE -- MANY OF THE BUILDINGS BUILT BEFORE 1994. ON THE LEFT YOU SEE WOOD FRAME BUILDING, AND ON THE RIGHT YOU SEE BRICK BUILDING. SO THESE ARE BUILDINGS IN A LAB -- THIS IS ACTUALLY THE HIGHLIGHT OF THE TALK. I'M NOT SURE HOW TO CONTROL IT HERE. AT ANY RATE, YOU WANT -- WE CAN DESIGN BUILDINGS THAT CAN WITHSTAND SEISMIC SHAKING. AND YOU WANT IT TO BEND NOT BREAK. BASICALLY WHAT YOU SAW THERE. SO ON THE LEFT, THESE ARE BOTH JUST LAB EXAMPLES OF A WOOD FRAME BUILDING, AND UNREINFORCED MASON REBUILDING, WE CALL IT A URM, THEY'RE OLDER BRICK BUILDINGS WITHOUT ENOUGH STEEL IN THEM, AND BASICALLY THEY WERE -- WE USED TO BUILD A LOT OF THEM BECAUSE THEY'RE FIRE RESISTANT. SO A LOT OF OUR FIRE STATIONS WERE ACTUALLY UNREINFORCED MASONRY BUILDING. THIS IS VERY BAD WITH RESPECT TO EARTHQUAKES. AS YOU SAW, IT JUST TOOK A FEW SECONDS, LIKE ONE OR TWO CYCLES OF SHAKING, AND THE THING CAME DOWN. WHEREAS THE WOOD FRAME BUILDING KEPT BENDING AND FLEXING, AND IT DID JUST FINE. SO ONE OF OUR CONCERNS IS JUST, YOU KNOW, WHAT BUILDINGS AND WHAT INFRASTRUCTURE IS BRITTLE, AND IF THAT'S IMPORTANT, THEN WE SHOULD BE CONCERNED ABOUT IT. THIS IS A STATEWIDE MAP, RED IN GENERAL IS BAD, RED DOTS ARE BAD, THERE ARE SCHOOLS IN CRITICAL EMERGENCY RESPONSE FACILITIES LIKE FIRE STATIONS, POLICE STATIONS, AND HOSPITALS, THAT BASED ON THE STATEWIDE SCREENING, OUR AGENCY DID, LOOKED LIKE THEY ARE BAD. THAT THEY'RE COLLAPSE PRONE. THERE'S AN EXAMPLE OF A SCHOOL THAT IS VERY NICE LOOKING SCHOOL, BUT THIS IS THE TYPE OF BUILDING THAT IS MADE ALL THE WAY THROUGH WITH BRICKS THAT CAN COME DOWN WITH JUST A FEW SECONDS OF SHAKING, AND IF SCHOOL CHILDREN ARE IN SCHOOL, THAT'S BAD. YOU COULD HAVE LOTS OF SCHOOL CHILDREN DIE. FROM THE RISK STANDPOINT, THEY'RE NOT IN THERE VERY OFTEN, THEY'RE NOT IN THERE IN THE EVENINGS, AT NIGHTS, ON THE WEEKENDS, BUT IF THEY HAPPEN TO BE IN THERE, AND THE EARTHQUAKE OCCURS, THAT'S BAD

NEWS. I TOOK OUR STATEWIDE STUDY AND JUST LOOKED AT THE MULTNOMAH COUNTY STRUCTURES. WE HAVE 331 SCHOOLS AND EMERGENCY RESPONSE BUILDINGS IN OUR DATABASE, AND JUST LOOKING AT THE DATE ALONE, 293 OF THEM WERE BUILT BEFORE 1993. SO SOME OF THEM ARE INHERENTLY MORE RESISTANT TO SHAKING AND SOME OF THEM ARE LESS, DEPENDING ON THE STRUCTURAL TYPE. SO THEN I JUST PULLED OUT THE SIX HOSPITALS IN THE AREA. THEY WERE -- THEY WERE INITIALLY CONSTRUCTED STARTING IN THE '20s. GOOD SAMARITAN HAS UNREINFORCED MASONRY BUILDING AND SO FORTH. THE ONLY HOSPITAL I'M AWARE OF THAT HAS HAD ANY SEISMIC UPGRADES IN YOUR LIST IS THE OHSU. THIS IS LOOKING AT ALL NONRESIDENTIAL STRUCTURES IN THE GREATER PORTLAND AREA AND BASED ON THE YEAR BUILT, RED IS BAD. SO YOU CAN SEE THERE'S A LARGE CONCENTRATION OF POTENTIALLY COLLAPSE-PRONE OR DAMAGE-PRONE STRUCTURES, ESPECIALLY IN THE DOWNTOWN AREA AND IT'S NOT A SURPRISE. I THINK YOU MIGHT OWN A FEW OF THESE AS WELL. SO THE FIRST CONCERN IS REALLY LIMITING LIFE. IT'S PROTECTING THE PUBLIC. SO LIFE SAFETY. WHERE WOULD WE EXPECT TO HAVE THE MOST FATALITIES? IT'S REALLY IN BRITTLE BUILDINGS THAT COLLAPSE AND DON'T LEAVE ANY VOID SPACE VERSUS A BUILDING THAT JUST BENDS AND DISSORTS IN DAMAGE. SO REALLY WEAK BUILDINGS WITH A LOT OF PEOPLE THAT TEND TO COLLAPSE, THAT'S WHERE YOU'RE GOING TO HAVE YOUR CONCENTRATION OF FATALITIES, AS WELL AS THE TSUNAMI INUNDATION ZONE. IF YOU'RE HIT WITH EVEN A LITTLE BIT OF WATER FROM A TSUNAMI, THEN IT'S -- THE CHANCES ARE BAD FOR YOU. ALSO LIK FAX -- LIQUEFACTION OCCURS WHEN YOU HAVE EARTHQUAKE SHAKING AND LOOSE SANDY SOIL THAT IS WATER SATURATED. SO YOU HAVE A LOT OF IT IN THE FLOODPLAINS AND A LOT OF IT RIGHT NEXT TO THE RIVER. THIS IS A PICTURE OF ME STANDING THERE IN AN EARTHQUAKE IN JAPAN, AND I'M ABOUT SIX FEET TALL. SO YOU CAN SEE -- IT'S A JOKE -- YOU CAN SEE THE GROUND CAN REALLY JUST MOVE OUT. AND THAT'S AN OLD RIVER CHANNEL. ON THE RIGHT IS EARTHQUAKE TRIGGERED LANDSLIDE. I'M ALSO STANDING RIGHT THERE. THAT ROAD LED TO THE WORLD'S LARGEST NUCLEAR POWER PLANT IN JAPAN. AND THAT ROAD WAS NOT ACCESSIBLE, THE NUCLEAR POWER PLANT DID HAVE SOME ISSUES, SO IT'S NOT GOOD TO TAKE OUT ROADS TO PLACES WHERE YOU WANT TO GET TO. OR AWAY FROM, ACTUALLY. SO PORTLAND HAS A LOT OF RIVERS. WE'RE AT THE CONFLUENCE OF THE COLUMBIA AND THE WILLAMETTE RIVER, AND WE HAVE A LOT OF THAT SOIL. WE HAVE PORT FACILITIES A LOT OF BURIED STRUCTURES, I'M STANDING THERE ON THE LEFT NEXT TO A TANK, THAT BECAUSE OF LIQUEFACTION AND BUOYANCY FORCES, THAT TANK POPPED UP WAY OUT OF THE GROUND. SO THERE WERE ABOUT 20,000 MANHOLES THAT HAD DAMAGE IN THE EARTHQUAKE, BUT BASICALLY WHEN THE GROUND THAT YOU'RE STANDING ON TURNS INTO LIKE A THICK SANDY SOUP TEMPORARILY, THEN YOU CAN HAVE DAMAGE TO YOUR STRUCTURES, WHETHER THEY'RE BURIED OR ON TOP OF THEM. ALSO WHEN -- I THINK WE'RE ALL VERY FAMILIAR WITH LANDSLIDES, IF YOU HAVE EARTHQUAKE SHAKING YOU CAN HAVE A LOT OF LANDSLIDES OCCUR ALL AT ONCE. YOU CAN HAVE TENS OF THOUSANDS OF LANDSLIDES. AND BECAUSE THAT SHAKING DESTABILIZES SLOPES. SO RIGHT NOW WE'RE GETTING FEMA

FUNDING TO WORK WITH YOU, AND OTHERS TO MAP WHAT YOU SEE HERE ON THE LEFT SIDE OF THE BOTTOM OF YOUR COUNTY, WE'RE NOT MAPPING THE EASTERN PART OF THE COUNTY BECAUSE WE DON'T HAVE FUNDING FROM FEMA TO DO THAT, BUT IF YOU WERE INTERESTED IN THAT, NOW IS A GOOD TIME TO TALK TO US ABOUT THAT.

>> Comm. McKeel: EXCUSE ME, CHAIR. I SAW YOU LOOKING MY WAY. DOES ANYONE HAVE THAT INFORMATION ON EAST MULTNOMAH COUNTY?

>> WELL, OUR AGENCY IS THE GEOLOGY DEPARTMENT AND WHAT WE DO IS WE -- HOPEFUL LI YOU HAVE A MAP TO LOOK AT THE GROUND SURFACE, AND WHAT WE'RE DOING IS MAPPING THE LANDSLIDES AND THE LANDSLIDE SUSCEPTIBILITY USING LIDAR. SO WE'RE IN THE PROCESS, I THINK WE JUST GOT THE FUNDING THIS WEEK. SO WE WILL OVER THE NEXT YEAR BE MAPPING ALL THE COLORED AREAS. AND PROVIDING THAT TO YOU TO THE CITY OF PORTLAND, THE CITY OF PORTLAND, THE PARTNER, AND WE WILL NOT BE MAPPING THE EASTERN PART BECAUSE WE DON'T HAVE FUNDING TO DO THAT. BUT IF YOU HAD FUNDING TO DO THAT, IT WOULD COST US LESS TO DO IT NOW THAN TO DO IT LATER. EVEN IF YOU HAD MONEY LATER, BECAUSE IT'S A ONE-TIME MOBILIZATION FEE VERSUS DOING IT TWICE TO GET IT SET UP. SO IF THAT AREA -- THERE ARE CLEARLY MANY, MANY LARGE LANDSLIDES IN THE EASTERN PART STARTING WITH -- IS THIS A POINTER? SO STARTING WITH THAT CUTOFF IS ABOUT SANDY RIVER, AND THEN IT ENTERS THE GORGE AND THERE ARE SOME VERY BIG LANDSLIDES THAT CAN OCCUR AND HAVE OCCURRED ALONG I-84, AND SINCE THAT'S A MAJOR TRANSPORTATION CORRIDOR, IT WOULD SEEM TO ME THAT YOU MIGHT WANT IT MAPPED.

>> Comm. McKeel: YOU'RE SAYING THIS MAP WHERE THE COLOR BREAKS OFF IS THE SANDY RIVER. DID I UNDERSTAND THAT CORRECTLY?

>> YEAH. SO IF YOU LOOK AT THE SCREEN HERE, THAT IS ABOUT WHERE THE SANDY RIVER COMES IN.

>> Comm. McKeel: EAST OF THE SANDY RIVER.

>> EAST, FROM THERE TO HERE IS ABOUT BONNEVILLE DAM. AND CASCADE LOCKS IS I THINK THE NEXT COUNTY.

>> Comm. McKeel: OK. SO WHAT AMOUNT OF FUNDING WOULD BE NEEDED TO DO THIS WORK?

>> USUALLY WE GO IN -- WE WOULD COME BACK TO YOU WITH A DETAILED PROPOSAL, BUT WE WOULDN'T GET INTO THIS WITHOUT \$100,000, SOMETHING LIKE THAT. I THINK WE MIGHT BE GETTING \$200,000 TO DO THAT PART.

>> Comm. McKeel: OK. BALLPARK. THANK YOU.

>> ANY OTHER QUESTIONS? SO ONE THING THAT WE DON'T THINK A LOT ABOUT IS OUR UTILITIES AND OTHER LIFELINE SERVICES. WE GET UP IN THE MORNING, WE BRUSH OUR TEETH, WE USE THE WATER, WE USE THE TOILET, TURN ON THE ELECTRICITY, AND MAKE A PHONE CALL, WHATEVER. THESE THINGS ARE USUALLY OPERATING VERY WELL, SO I HAVE UP HERE FUEL, WATER, ELECTRICITY, TRANSPORTATION, COMMUNICATION. OUR COMMUNITIES RELY ON THEM. IN EARTHQUAKES, IN BIG EARTHQUAKES THEY CAN ALL GO DOWN. ALL AT ONCE. AND IT CAN BE A BIG PROBLEM. SO THERE'S JUST THE FEW -- THIS IS SUPPOSED TO SHOW THAT THIS BALANCED WHEEL IS NO LONGER BALANCED, IT'S BROKEN, IT'S IN RED, AND YOU CAN SEE THAT TOWERS ARE DOWN AND SO FORTH. AND THIS IS A REAL PROBLEM WHEN ALL OF THIS GOES DOWN AT ONCE. SO THERE'S PLENTY YOU CAN DO TO MINIMIZE THE DAMAGE, AND ALSO TO GET BACK UP AND RUNNING QUICKLY. SO THIS IS SUPPOSED TO SHOW THAT THAT IS DOABLE. YOU CAN HAVE, FOR INSTANCE, ON THE UPPER RIGHT A MOBILE WATER UNIT SO THAT YOU CAN CLEAN YOUR WATER SO IT'S POTABLE WATER. ONE OF THE GOALS AFTER AN EARTHQUAKE -- WATER AND WASTEWATER SYSTEMS ALWAYS GO DOWN. AND IF YOU THINK ABOUT IT, THEY'RE LARGELY BUILT DOWN WHERE THE GROUND IS LIQUEFIABLE AND THAT'S GOING TO CAUSE DAMAGE. BRIDGES. THEY OFTEN CROSS RIVERS WHERE THE GROUND IS LIQUEFIABLE. SO YOU CAN GET MOBILE WATER UNITS, YOU CAN GET MOBILE CELLULAR UNITS, AND GENERATORS AND SO FORTH TO GET YOU BACK UP AND RUNNING QUICKLY, AND YOU, ALSO DO THINGS TO MAKE SURE THAT THE DAMAGE ISN'T THAT GREAT TO BEGIN WITH. WE CAN START BY INCREASING AWARENESS. I HAVE BEEN TALKING ABOUT EARTHQUAKES LITERALLY FOREVER, IT SEEMS LIKE. FIRST EARTHQUAKE I WORKED ON WAS THE LOMA PRIETA EARTHQUAKE, WHICH JUST HAD ITS 25-YEAR ANNIVERSARY. REALLY HERE IN OREGON PEOPLE STARTED TO VERY MUCH WAKE UP TO THE FACT THAT WE HAVE EARTHQUAKE RISKS WITH THE TOHOKU EARTHQUAKE, BECAUSE THEY SAW TSUNAMI WAVES RUINING THE COASTAL PLANTS, AND THE FUKUSHIMA NUCLEAR POWER PLANT, AS THE JAPANESE -- THEY WERE CALLING IT AN INCIDENT, IT WAS MORE THAN JUST AN INCIDENT. THEY HAVE NO NUCLEAR POWER PLANTS THAT ARE OPERATING RIGHT NOW IN JAPAN, SO EARTHQUAKES CAN BE VERY DISRUPTIVE. SO ONE THING IS TO INCREASE AWARENESS, MORE THAN WHAT WE HAVE NOW, AND THEN TO IMPROVE OUR RESILIENCE. AND I'LL SHOW YOU SOME EXAMPLES OF SEISMIC UPGRADES. SO IF PEOPLE UNDERSTAND THAT WE HAVE EARTHQUAKES AND ARE MORE PREPARED FOR IT PSYCHOLOGICALLY, THINGS GO BETTER. PEOPLE AREN'T AS FREAKED OUT. SO THAT'S WHAT THE LEFT FIGURE IS SUPPOSED TO SHOW. AND I THINK IN THE RIGHT FIGURE, WHICH JUST SHOWS RECYCLING, IT CAN BE SIMILAR TO IMPROVING OUR UNDERSTANDING WITH RECYCLING. WE STARTED VERY PROUDLY IN THE '60s WITH THE BOTTLE BILL, AND NOW WE'RE -- WE STARTED TO RECYCLE OTHER THINGS, ALUMINUM CANS, NEWSPAPERS, AND NOW WE'RE RECYCLING FOOD SCRAPS AND WE DO THIS EVERYWHERE. AT WORK, AT THE AIRPORT, AT HOME. SO IT'S BEEN A MULTIDECADE GROWING PROCESS. THAT SAME THING CAN BE DONE FOR PREPARING OURSELVES FOR NATURAL DISASTERS. WHETHER IT'S EARTHQUAKES OR DIFFERENT NATURAL DISASTERS. THE OREGON

RESILIENCE TASK FORCE WHICH JUST ISSUED ITS RECOMMENDATIONS TO THE LEGISLATURE, EARLIER THIS MONTH, ONE OF THEIR MAIN RECOMMENDATION ASSIST TO HAVE A RESILIENCE ADVISOR IN THE GOVERNOR'S OFFICE SO THAT IT -- SO THAT PERSON PROVIDES KIND OF HOLISTIC LEADERSHIP AND ALSO TO DO A LOT MORE PUBLIC EDUCATION. AND I AM NOT A SOCIAL SCIENTIST, SO I'LL GET BACK TO THE INFRASTRUCTURE IN A LITTLE BIT, BUT THE TYPE OF THINGS THAT YOUR EMERGENCY MANAGERS CAN HELP AND YOU CAN HELP DO IS JUST TO GET CITIZENS PREPARED. THAT'S BY DOING SHAKEOUT DRILLS SUCH AS THE ONE YOU DID LAST WEEK, AND REALLY SHOWING THAT IT'S A GOOD THING TO DO, IT'S NOT JUST FOR CHILDREN. WE WANT TO ALSO LIVE THROUGH IT. AND ENCOURAGE HOME INSPECTIONS, SO I HAVE ON HERE A LITTLE FEMA HOUSE HUNT DIAGRAM WHERE YOU GOING THROUGH YOUR HOUSE, LOOKING AT -- LOOKING FOR EARTHQUAKE VULNERABILITIES. WHEN YOU BUY A HOUSE YOU HAVE A HOME INSPECTION DONE, AND THEY'LL LOOK AT YOUR PLUMBING AND ELECTRICITY AND ROOF AND SO FORTH, THE SAME TYPE OF THING CAN BE DONE, BUT REALLY ON AN EASIER LEVEL FOR THE MOST PART IN YOUR OWN HOME. AND EMERGENCY MANAGERS HAVE BEEN TALKING ABOUT HAVING A 72-HOUR EMERGENCY KIT. FOR A DISASTER AS BIG AS WHAT WE WOULD HAVE WITH A CASCADIA, IT WOULD BE MORE LIKE THREE WEEKS OR SO AT HOME. SO THEY CALL IT SHELTER IN PLACE. I CALL IT CAMP AT HOME. BUT THE IDEA IS THAT YOU'RE GOING TO BE ON YOUR OWN FOR QUITE SOME TIME, IT WILL TAKE A WHILE TO GET SUPPLIES IN. AS FAR AS INFRASTRUCTURE, WE HAVE A LOT OF INFRASTRUCTURE THAT CAN BE EVALUATED FOR SEISMIC VULNERABILITIES AND PRIORITIZED AND FIXED. NOT EVERYTHING THAT'S VULNERABLE CAN GET FIXED. THERE'S OBVIOUSLY NOT ENOUGH MONEY FOR THAT. BUT CERTAIN THINGS ARE MUCH MORE IMPORTANT, AND CERTAIN THINGS IT'S VERY COST EFFECTIVE TO FIX THEM. SO THAT'S THE TYPE OF THING THAT CAN BE -- THAT'S THE KIND OF APPROACH THAT CAN BE TAKEN. I THINK THAT YOU HEARD ABOUT THE OREGON RESILIENCE PLAN EARLIER THIS YEAR. IT'S A 50-YEAR VISION, AND THERE WAS A TASK FORCE THAT GOT TOGETHER FOR ABOUT A YEAR AND LOOKED AT THE MANY, MANY, MANY RECOMMENDATIONS IN THE OREGON RESILIENCE PLAN, AND CAME UP WITH A TWO-PAGE LIST OF PRIORITIES. SO I REDUCED THOSE PRIORITIES DOWN TO THOSE BULLETS, BUT THAT'S WHAT THEY ARE. FOR THE LEGISLATURE, THEY RECOMMENDED HIT LIST OF ABOUT EIGHT, NINE THINGS THERE FOR THE LEGISLATURE TO CONSIDER SOME OF THEM COST A LOT OF MONEY, AND SOME OF THEM DON'T. AS JUST A REAL QUICK RECAP, THE OREGON RESILIENCE PLAN TOOK A LOOK AT OREGON AND TRIED TO FIGURE OUT WHERE ARE WE, AND WHERE SHOULD WE BE? AND THE BUSINESS COMMUNITY SAID, WE CAN TOLERATE TWO OR -- ABOUT THREE WEEKS OF OUTAGES, OF ELECTRICITY AND WATER AND SO FORTH, AND IF WE'RE A BIG BUSINESS, WE'RE GOING TO TAKE OUR BUSINESS TO OUR OTHER LOCATIONS AND IF WE'RE A SMALL BUSINESS WE'RE GOING TO GO OUT OF BUSINESS. RIGHT NOW THE STATISTICS OF THE DOWN TIME FOR OREGON, FOR THE VALLEY WOULD BE A LONG TIME. WE WOULD BE WITHOUT ELECTRICITY FOR MONTHS, WITHOUT FIRE AND POLICE SERVICES, WATER SERVICES, AND WASTEWATER SERVICES AND HEALTH CARE FOR MANY, MANY MORE MONTHS. SO THAT'S -- THAT'S BAD NEWS FOR US.

OREGON -- HAVING A LONG DOWN TIME IS BAD FOR OUR ECONOMY. AND ONE OF THE THINGS THAT WE HAVE HERE IS WE'RE AT THE CONFLUENCE OF THESE RIVERS, WE HAVE I-5 AND 84 GOING NORTH, SOUTH, AND -- NORTH-SOUTH AND EAST-WEST, WE HAVE A LOT OF RIVER TRAFFIC AND AIR TRAFFIC, WE'RE AT A MULTIMODAL TRANSPORTATION HUB, AND THIS IS VITAL TO OUR ECONOMY, AND THAT TRANSPORTATION HUB, THAT TRANSPORTATION SYSTEM REALLY DEPENDS A LOT ON OUR FUEL. AND OUR FUEL IS STORED ON ALL ON LIQUEFIABLE SOIL. SO OUR STATE FUEL SUPPLY IS ALL IN ONE BASKET, AND IT'S IN A VERY BAD BASKET. THIS JUST SHOWS WHERE THOSE FUEL TANKS ARE. OUR DEPARTMENT PUT OUT A REPORT LAST YEAR THAT SHOWS WHERE THEY'RE LOCATED. IT'S SHOWN THERE IN RED JUST DOWNSTREAM FROM THE FREMONT BRIDGE. IT'S AT THE INTERSECTION WHERE WE HAVE NATURAL GAS, LIQUID FUEL, AND PETROLEUM. THE PETROLEUM COMES FROM A PIPELINE AND FROM SHIPS FROM WASHINGTON STATE, AND THEN THEY GO THROUGH THESE FUEL TERMINALS. IF YOU TAKE A LOOK BACK IN TIME AND LOOK AT THAT AREA, YOU SEE THE LOWER RIGHT LEFT HAND FIGURE, YOU SEE THE PORTLAND HILLS FAULT ON THE VERY LEFT THERE. THAT AREA USED TO BE THE RIVER. AND IF YOU LOOK AT THE UPPER RIGHT HAND PHOTO, THAT PHOTO SHOWS HOW WE AMASSED LAND THERE. WE BASICALLY SUCKED UP THE SAND AT THE BOTTOM OF THE RIVER, AND DUMPED IT ALONG THE SHORE, AND THEN WE BUILT ON IT. AND THAT SOIL IS HIGHLY LIQUEFIABLE. WITH TOOK A LOOK RAT HUNDREDS OF BORING LOGS AND LOOKED AT THE LIQUEFACTION ANALYSES, SO WE KNOW THAT THE AREA HAS A HIGH LIQUEFACTION SUSCEPTIBILITY. WE BUILT OUR TANKS RIGHT NEXT TO THE RIVER, AND IN ADDITION TO HAVING THOSE TANKS BEING SUSCEPTIBLE TO SPILLING AND MOVING OUT INTO THE RIVER, THERE'S ALSO THE POTENTIAL FOR OTHER TYPE OF PROBLEMS LIKE FIRES AND SO FORTH, THIS IS JUST AN IMAGE FROM THE TOKU EARTHQUAKE. MY RESPONSIBILITY ON THAT ENGINEERING INVESTIGATION WAS NATURAL GAS, SO AS ALWAYS, AFTER A BIG EARTHQUAKE LIKE THIS, THEY HAD A MAJOR FUEL SHORTAGE, AND THAT'S WHAT WE SHOULD BE EXPECTING HERE. ON THE RIGHT IS JUST THE WILLAMETTE RIVER AND THE YELLOW CIRCLES ARE THE FUEL FACILITIES THAT WE EVALUATED. IF YOU TAKE A CLOSE LOOK AT THEM, THIS IS WHAT THEY LOOK LIKE, UPPER LEFT YOU CAN SEE BIG BARGES COME IN TO OFFLOAD FUEL AND ONLOAD FUEL. ON THE LOWER LEFT YOU CAN SEE THAT THIS IS ONE OF THE PIERS, AND IF YOU TAKE A CLOSE LOOK AT IT, YOU COULD SEE THE CONSTRUCTION OF THE PIER WHICH IS SORELY INADEQUATE. ENGINEERING TERMS, JUST IS -- IT JUST SUCKS. YOU WOULD NOT ALLOW -- [LAUGHTER] -- YOUR BACK YARD PORCH TO BE BUILT OUT OF SOMETHING LIKE THAT. AND THE ISSUE IS THE GROUND CAN LIQUEFY AND MOVE TOWARD THE RIVER AND THIS IS AN EXAMPLE OF A SIMILAR PIER IN THE '64 ALASKA EARTHQUAKE. WE ALSO HAVE ELECTRICAL TRANSMISSION CROSSINGS IN THAT AREA. THESE ARE HIGH-VOLTAGE TOWERS, TWO ARE OWNED BY BPA. AND BPA ESTIMATED THAT THEIR TWO IN THAT ARE AFTER DOING INVESTIGATIONS RIGHT ON SITE THERE, DOING GOOD ANALYSES, THE GROUND THERE CAN MOVE OUT BY 25 FEET. TOWARDS THE RIVER, BAD NEWS FOR THE TOWERS, THEY COULD FALL OVER LIKE THE LOWER LEFT HAND IMAGE. THAT LOWER LEFT HAND IMAGE IS A TOWER THAT FAILED

BECAUSE OF LIQUEFACTION AND IT ACTUALLY BENT THE NEXT TWO TOWERS COMPLETELY IN HALF. SO THE GOOD NEWS HERE IS THAT WE'VE TALKED TO BONNEVILLE OVER AND OVER AND OVER ABOUT THIS, AND THEY ARE IN THE PROCESS OF FIXING THOSE TWO RIVERS. THOSE TWO TOWERS. IN FACT, THE TOWERS ON BOTH SIDES OF THE RIVER. AND THEY'LL PROBABLY BE GETTING TO THAT BY NEXT YEAR. IT TAKES A WHILE TO COME UP WITH A DESIGN AND SO FORTH. THE ISSUE THERE IS THAT THE THIRD TOWER IS OWNED BY A PRIVATE ELECTRICAL COMPANY, AND THEY DON'T HAVE PLANS TO FIX THAT ONE, AND IF THAT ONE FAILS, IT CAN IMPACT BPA'S TOWERS. SO THIS IS WHY IT'S IMPORTANT FOR PUBLIC-PRIVATE PARTNERSHIPS, FOR US TO BE WORKING TOGETHER.

>> Comm. Shiprack: HOW DO YOU ENGINEER A TOWER TO WITHSTAND A 25-FOOT MOVEMENT?

>> IT'S TRICKY. BUT IT'S COMPLETELY, COMPLETELY DOABLE. LIQUEFIABLE GROUND IS EASIEST IF YOU FIX IT BEFORE YOU BUILD ON IT. BUT SINCE THESE ARE ALREADY BUILT ON, WHAT YOU NEED TO DO IS IMPROVE THE FOUNDATION AND IMPROVE THE GROUND. SO THE GROUND NEEDS TO BE DENSER AND STRONGER, AND THEY WILL -- RIGHT NOW THESE TOWERS HAVE FOUR ISOLATED LEGS. AND THEY ARE, THEY'RE DESIGNING THIS TO TIE THOSE TOGETHER AND IMPROVE THE FOUNDATION BENEATH THEM. SO THEY HAVE MANY PILES, A BUNCH OF MINI-PILES TO PUT UNDERNEATH THEM. AT THE SAME TIME THEY'RE DOWN THERE, THEY WILL BE DENSIFYING THE GROUND AROUND THERE, SO IT'S STRONG ENOUGH WHERE IT WON'T LIQUEFY. AND THAT HAS BEEN DONE IN MANY PLACES. AND WE'RE LEARNING A LOT ABOUT IT RIGHT NOW BECAUSE IN THE CHRISTCHURCH EARTHQUAKE IN 2011, THERE WERE ABOUT 80,000 HOMES THAT WERE DAMAGED FROM LIQUEFACTION DAMAGE. AND TENS OF THOUSANDS OF THEM WON'T BE REBUILT. IT'S ABOUT A COMMUNITY THE SIZE OF PORTLAND. AND, YOU KNOW, SO NOW THEY'RE IMPROVING SOME OF THE HOMES WITH POST-DAMAGE FIXES, WHICH IS MUCH MORE EXPENSIVE THAN DEALING WITH THEM FIRST. I SUSPECT THAT YOU'RE VERY WORRIED ABOUT BRIDGES. YOUR OWN AND ALSO OTHERS' BRIDGES. ODOT, THIS IS ONE WHERE YOU SEE THE UPPER RIGHT HAND FIGURE WHERE YOU HAVE A DOUBLE-DECK STRUCTURE, THAT ONE IS EXPECTED TO HAVE PROBLEMS WITH COLLAPSING. THERE'S THESE ELBOWS JUST OUT OF VIEW THAT ARE NOTORIOUS FOR BEING WEAK FROM LATERAL SHAKING. THE BOTTOM FIGURE SHOWS WHERE THE BRIDGE CONNECTS DOWN TO THE FOUNDATION, AND THAT PIN CONNECTION IS A NOTORIOUSLY BAD TYPE FOR EARTHQUAKE PERFORMANCE. SO EVEN THESE -- SOME OF THE RELATIVELY NEWER BRIDGES ARE SEISMICALLY DEFICIENT AND IT'S SOMETHING THAT SHOULD GO INTO YOUR PLANNING AS WELL AS ODOT'S PLANNING. ODOT IS THEY DO HAVE A VERY GOOD SEISMIC PLAN OF WHAT THEY WOULD FIX AND WHAT ORDER. THEY'RE JUST WAITING FOR A LOT OF MONEY. AND THIS IS ACTUALLY A MAP OF THEIR PRIORITY ROUTES IN BLUE, AND IN GREEN. AND THE HIGHWAY 30 ALONG THE FUEL HUB AREA IS ONE OF THEIR PRIORITY ROUTES. AND ONE OF THE REASONS WHY IT WAS SELECTED IS BECAUSE

THAT'S WHERE ALL OF THE STATE'S FUEL IS, AND THAT'S OBVIOUSLY IMPORTANT TO OUR ECONOMY AND RECOVERY.

>> Comm. Smith: I HAVE A QUICK QUESTION. GOING BACK TO THE ODOT PLAN, DOES THAT INCLUDE MULTNOMAH COUNTY BRIDGES OR ALL BRIDGES IN THE STATE OF OREGON?

>> IT DOES NOT INCLUDE ANY LOCALLY OWNED BRIDGES. IT ONLY INCLUDES ODOT BRIDGES.

>> Comm. Smith: OK. THANK YOU.

>> I KNOW THAT YOU HAVE A NUMBER OF BRIDGES, THE BURNSIDE BRIDGE IS ONE WHERE WE -- WHERE WE HAD A FIELD TRIP A FEW YEARS BACK, INCLUDING THE COUNTY. THE BURNSIDE BRIDGE IN 2002 HAD LIFE SAFETY UPGRADE. SO THE DECKS ARE TIED TO THE PIERS UNDER THE BRIDGE, AND THE DECKS WILL NOT PULL APART FROM THE PIERS AND ROCK DOWN AND -- DROP DOWN AND KILL PEOPLE. BUT IT IS FAR FROM BEING READY TO ACTUALLY BE IN ANY KIND OF WORKABLE SHAPE AFTER A MAJOR EARTHQUAKE. AND IT WOULD BE EXTREMELY EXPENSIVE TO FIX IT SO THAT IT'S ACTUALLY OPERATIONAL AFTER AN EARTHQUAKE. THERE ARE ISSUES WITH THE STRUCTURE ITSELF, INCLUDING THE FOUNDATION AND IT'S PRETTY EXPENSIVE TO GO INTO THE GROUND, AND THEN IF YOU LOOK AT THE BUILDING ON THE RIGHT SIDE OF THE BRIDGE THERE, THAT IS RIGHT ABUTTED NEXT TO THE BRIDGE. THERE ARE ISSUES WITH THAT BUILDING SLAMMING INTO THE BRIDGE, AND ALSO HAVING PIECES OF THAT BUILDING FALL ONTO THE BRIDGE. IT'S A RETROFITTED UNREINFORCED MASONRY BUILDING BUT YOU'LL STILL HAVE A BUNCH OF RAINING BRICKS BECAUSE EACH BRICK PIECE ISN'T SECURE. THE UPGRADE THAT WAS DONE WAS EXTREMELY IMPORTANT. IT WOULD PREVENT PROBLEMS LIKE THIS. THIS IS JUST AN IMAGE OF A NEWER BRIDGE THAT THE BRIDGE DECK PULLED OFF FROM THE PIERS AND THEN YOU GET A BUNCH OF CARS THAT END UP UPSIDE DOWN. THIS IS FROM AN EARTHQUAKE, VERY SIMILAR TO WHAT WE WOULD HAVE HERE. THIS SANTIAGO WAS INLAND LIKE PORTLAND IS INLAND, AND THIS IS STRUCTURE RIGHT BY THE SANTIAGO AIRPORT. THERE'S BEEN A LOT OF VERY, VERY GOOD WORK THAT HAS BEEN DONE. EMERGENCY RESPONSE FACILITIES ARE USUALLY THE FIRST TO GET FIXED BECAUSE THEY ALREADY KNOW THAT THEY NEED TO BE THERE IN AN EMERGENCY. ALL OF THE PORTLAND FIRE STATIONS HAVE BEEN UPGRADED, THEY HAVE A NEW EMERGENCY OPERATIONS CENTER, THERE'S AN IMPORTANT GRANT PROGRAM THAT I WANTED TO LET YOU KNOW ABOUT. IT'S ONE THAT GOT ITS START A FEW YEARS AGO, IT HAS SOME FUNDING IN IT THAT IS AVAILABLE NOW FOR EMERGENCY OPERATION CENTERS. THEY JUST -- FOR EMERGENCY RESPONSE FACILITIES. SO THAT GRANT OPPORTUNITY HAS BEEN EXTENDED INTO THE LATTER PART OF NOVEMBER. YOU CAN GET \$1.5 MILLION TO DO SEISMIC UPGRADES, IT'S NOT A LOAN PROGRAM, IT'S A GRANT PROGRAM. AND IF YOU KNEW OF ANY OF YOUR FACILITIES OR OTHER FACILITIES OWNED BY OTHERS IN MULTNOMAH COUNTY, THIS WOULD BE A GOOD OPPORTUNITY FOR THEM. ALL YOUR HOSPITALS COULD

USE A LITTLE BIT OF A NUDGE. THERE ARE LOTS OF OTHER GOOD STUFF GOING ON. THIS IS WATER RESERVOIR THAT IS NOW IN OPERATION WITH THE CITY OF PORTLAND, AND IT'S ON POWELL BUTTE, AND IT'S SEISMICALLY DESIGNED AND CONSTRUCTED. THE UNIVERSITY SYSTEM, ALL SEVEN UNIVERSITIES HAVE A SEISMIC -- AN INSTITUTIONALIZED SEISMIC MITIGATION PROGRAM, WHICH IS VERY LONG-TERM. AND IT STARTED WITH A COUPLE OF KIND OF DEMONSTRATION EXAMPLES. THIS IS THE BUILDING, HOUSING FOR PSU, WE GOT SEISMIC FUNDING FROM FEMA AND JUST STRENGTHENED THE LOWER FLOOR SO IT WOULDN'T FALL OVER. AND THESE THINGS FALL OVER, ESPECIALLY IF IT'S WEAK AT THE LOWER FLOORS. THIS IS MY LAST SLIDE. THIS IS SHOWING YOU THAT IT CAN BE COMPLICATED AND EXPENSIVE TO DO SEISMIC UPGRADES, THIS IS THAT ONDINE BUILDING WHERE THE REBAR WAS INADEQUATE, SO THERE'S SHEER WALLS THAT THERE'S CONCRETE WALLS THAT ARE BEING ADDED AND BIG BRACING THAT ARE BEING ADDED, BUT YOU HAVE HUNDREDS OF STUDENTS IN THERE, 24/7, SINCE IT'S A RESIDENCE HALL. AND YOU KNOW, IT'S WORTH TO DO FOR LIFE SAFETY. OK. SO THAT'S WHAT I PREPARED. AND IF YOU HAVE ANY QUESTIONS, I WOULD BE HAPPY TO ANSWER THEM.

>> Chair Kafoury: QUESTIONS OR COMMENTS? COMMISSIONER BAILEY.

>> Comm. Bailey: THANK YOU, MADAM CHAIR. THANK YOU SO MUCH. VERY SOBERING PRESENTATION AND ONE THAT WE HOPE WE CAN USE TO GET THE WORD OUT MORE GENERALLY TO THE PUBLIC ABOUT THE RISKS HERE FOR SEISMIC SAFETY. I'M CURIOUS, YOU TALKED ABOUT BRIDGES OBVIOUSLY THAT'S A MAJOR CONCERN HERE IN MULTNOMAH COUNTY. THE COSTS OF UPGRADING THOSE BRIDGES FOR SEISMIC RESILIENCY IS QUITE HIGH. ARE YOU AWARE OF, WE CAN TAKE THIS ANSWER OFFLINE IF THAT'S MORE APPROPRIATE, ARE YOU AWARE OF FEDERAL MONEYS THAT ARE COMING DOWN THE PIPELINE TO HELP STATES AND LOCAL GOVERNMENTS WITH INFRASTRUCTURE? IS THAT MONEY GENERALLY DRIED UP? [LAUGHTER]

>> HMM. SORRY, I DIDN'T MEAN TO LAUGH. ONE OF THOSE INAPPROPRIATE RESPONSES. WELL, THERE ARE DIFFERENT FEDERAL POTS OF MONEY THAT ARE AVAILABLE FOR DOING DIFFERENT THINGS. SO ODOT IS THE PIPELINE FOR GETTING FEDERAL MONEY TO WORK ON HIGHWAY BRIDGES. LOCAL BRIDGES, I THINK YOU STILL HAVE TO WORK WITH ODOT TO MAKE IT CLEAR THAT WHERE -- WHERE YOUR BRIDGES ARE ON THE PRIORITY LIST. SO I THINK THAT GETTING -- FOR BRIDGES, I THINK YOU NEED TO WORK WITH ODOT TO BECOME A PRIORITY TO GET FEDERAL FUNDS. FOR OTHER THINGS, YOU CAN GO TO OTHER PLACES LIKE FEMA HAS MONEY TO DO PLANNING, SO RESILIENCE PLANNING -- THEY HAVE MONEY, THEY'RE BIG ON MAKING PLANS, AND ONE OF THE STUFFS COULD TAKE IS TO DO RESILIENCE PLANNING, THAT'S LOOKING AT WHAT ARE YOUR VULNERABLE STRUCTURES THAT YOU OWN, FIRST OF ALL, YOUR OWN PORTFOLIO, YOU HAVE, WHAT, 150 BUILDINGS, SOME OF THEM ARE BIG LIKE THIS ONE, AND BRIDGES, AND DETERMINE WHICH ONES ARE VULNERABLE AND WHICH ONES ARE IMPORTANT AND WHICH ONES ARE ACTUALLY COST EFFECTIVE TO FIX. SO I

KNOW THAT THE BURNSIDE BRIDGE IS AN EMERGENCY BRIDGE, BUT IT MAY NOT BE COST EFFECTIVE TO FIX IT. SOME THINGS ARE NOT WORTH FIXING. IT'S BETTER TO START BRAND-NEW. SO -- SO IF YOU DO RESILIENCE PLANNING YOU CAN PRIORITIZE WHAT YOU ACTUALLY WANT TO FIX. WHETHER YOU OWN IT OR NOT IN THE COUNTY. AS FAR AS ACTUALLY FIXING THINGS, FEMA HAS SOMETHING CALLED PREDISASTER MITIGATION GRANT FUNDS TO FIX CERTAIN BUILDINGS. SO WE GOT FUNDING TO FIX FIVE DIFFERENT UNIVERSITY BUILDINGS THROUGHOUT THE STATE, AND THE ONDINE BUILDING WAS ONE OF THEM. THEIR GRANTS ONLY GO UP TO \$3 MILLION, WHICH IS THE MAXIMUM. \$3 MILLION DOESN'T ALWAYS GO A LONG WAY. IT WOULDN'T GO A LONG WAY FOR THE BURNSIDE BRIDGE. AND THEN THERE'S DIFFERENT -- THERE'S DIFFERENT -- SO I'M SORRY, I'M JUST STARTING TO BABBLE BECAUSE I'M THINKING OF THE DIFFERENT POTS, SOME POTS ARE AVAILABLE FOR DIFFERENT STRUCTURES, SOME POTS ARE NOT AVAILABLE FOR BUILDING NEW STRUCTURES, AND DEMOLITION, AND SO FORTH. SO WHY DON'T WE TAKE THIS OFFLINE?

>> Comm. Bailey: IT SOUNDS LIKE PERHAPS YOU'RE SAYING THERE ARE A FEW OPTIONS THAT ARE OUT THERE, NOT MANY, AND MAYBE WE OUGHT NOT TO HOLD OUR BREATH AND WAIT FOR THE CAVALRY.

>> YEAH. I THINK THAT YOU NEED TO RELY ON YOUR OWN MONEY AND FIND MONEY TO HELP WHERE YOU CAN. AND YOU DON'T NEED TO HAVE EVERY BUILDING, EVERY BRIDGE, YOU KNOW, FIXED. YOU HAVE TO PRIORITIZE. AND IF IT'S IMPORTANT ENOUGH TO THE LOCAL CITIZENS, AND YOU HAVE A PERSUASIVE CASE, THEN IT WILL PROBABLY GET FUNDED. I KNOW THAT WHAT YOU GET 65% OF YOUR FUNDS FROM PROPERTY TAXES, THAT ONE MIGHT BE HARD TO INCREASE. BUT THERE ARE PARTNERSHIPS THAT CAN BE MADE WITH BUSINESSES WHO WILL WANT TO HAVE WATER AND ELECTRICITY AND TRANSPORTATION THAT I THINK WOULD NEED TO BE EXPLORED.

>> Comm. Bailey: THANK YOU.

>> Comm. Smith: I HAVE A QUESTION. MS. WANG, YOU WERE ON THE RESILIENCY PLAN'S TSUNAMI WORK GROUP?

>> I WAS NOT. BUT I CAN -- I MAY HAVE BEEN. I WAS CERTAINLY INVOLVED WITH THE OREGON RESILIENCY PLAN.

>> Comm. Smith: THEY HAVE YOUR NAME DOWN HERE. UNLESS THERE'S SOMEONE ELSE.

>> OK. YES, I WAS ON THAT.

>> Comm. Smith: THE REASON WHY I ASK YOU THIS, JUST TO KIND OF FOLLOW UP ON COMMISSIONER BAILEY, I HAD A CONVERSATION WITH OUR TRANSPORTATION DEPARTMENT IN REGARDS TO THE BURNSIDE BRIDGE. AND WE DO -- WE HAVE ABOUT \$39 MILLION THAT IS FEDERAL MONEY THAT'S

BEING HELD THERE. UNTIL THE NEXT COUPLE YEARS. SO WE DO HAVE MONEY TO DO THE BURNSIDE BRIDGE. SO THE QUESTION I WAS GOING TO ASK YOU, IN TERMS OF A TSUNAMI, HOW IS THAT GOING TO IMPACT THE WILLAMETTE RIVER IN TERMS OF OUR BRIDGES? EVEN IF WE HAVE THEM EARTHQUAKE READY, HOW IS THAT TSUNAMI -- I'M TRYING TO GET A SENSE OF WHAT THAT LOOKS LIKE.

>> THERE HASN'T BEEN A ROBUST TSUNAMI ANALYSES TO SEE HOW FAR THE IMPACTS OF A TSUNAMI WOULD BE UP THE COLUMBIA RIVER UP TO THIS AREA. WE KNOW ITS TIDE, THERE'S TIDAL -- UP TO THE BONNEVILLE DAM. BUT I WOULD SAY FROM WHAT HAS BEEN OBSERVED FROM PAST EARTHQUAKES AND WHAT THE TSUNAMI MODELERS GENERALLY THINK, THE TSUNAMI AFFECTS MAYBE MEASURABLE HERE, BUT NOT DAMAGING.

>> Comm. Smith: LIKE IT WOULD BE ON THE COAST.

>> LIKE IT WOULD BE ON THE COAST. SO THE TSUNAMI WILL DO YOU KNOW, 99% OF ITS DAMAGE RIGHT WITHIN ABOUT A MILE FROM THE COAST IN LOW-LYING AREAS, AT LOW ELEVATIONS LIKE THE CITY OF SEASIDE. THE CITY OF SEASIDE COULD BE, YOU KNOW, 90% WIPED OUT. AND WE'VE SEEN PLENTY OF EXAMPLES OF THIS FROM EVEN THE JAPAN EARTHQUAKE. THOSE COASTAL COMMUNITIES ARE STILL HAVING LOTS OF PROBLEMS RECOVERING. AND IF WE HAD KNOWN ABOUT THE TSUNAMI RISK, YOU KNOW, A LONG TIME AGO, I WOULD SAY WOULD NOT HAVE BEEN A GOOD IDEA TO BUILD IN SEASIDE.

>> Comm. Smith: AND THE REASON WHY I'M WORRIED, PORTLAND IS KIND OF LIKE IN A T, WE HAVE THE WILLAMETTE RIVER, AND IT GOES INTO THE COLUMBIA, SO WE'RE SURROUNDED BY ALL THESE WATERS. WE HAVE ALL THE LIQUID FUEL ALONG THE WILLAMETTE RIVER, I'M JUST TRYING TO FIGURE OUT WHAT THAT WOULD LOOK LIKE IN AN 8.8 EARTHQUAKE AND TSUNAMI PUT TOGETHER IN TERMS OF WHAT OUR -- IN REALITY WHAT OUR REAL RISKS ARE AND WHAT THAT REALLY IS GOING TO LOOK LIKE, ARE WE REALLY PREPARED FOR WHAT IT COULD BE?

>> YOU KNOW, I THINK VERY WORST CASE SCENARIO WAS DONE, IT WOULD MATTER IF THE TIDES ARE HIGH OR LOW, IT WOULD MATTER IF IT'S INCOMING TIDE, OR OUTGOING TIDE. THERE'S LOTS OF THINGS THAT WOULD MATTER, BUT I WOULD SAY THAT THE TSUNAMI INFLUENCE WOULD BE MINOR IN THE -- IF AT ALL IN THE WILLAMETTE RIVER. THE WILLAMETTE RIVER -- THE BANKS OF THE -- THE TSUNAMI WILL LIKELY -- WILL VERY UNLIKELY HAVE ANY DRY LAND INUNDATION. IT WON'T COME UP ONTO OUR DRY LAND IN THIS AREA.

>> Comm. Smith: THAT'S WHAT I'M TRYING TO FIGURE OUT.

>> SO THAT WOULD NOT OCCUR. BUT THERE COULD BE SOME STRONGER CURRENT AND THOSE -- WHERE THE WATER IS ALREADY -- WHERE IT'S ALREADY WET ALL THE TIME. AND THOSE CURRENT CAN CAUSE DAMAGE TO

PIERS AND WHARVES AND BOATS AND SO FORTH. THAT'S WHAT HAPPENED IN THE BROOKINGS HARBOR IN 2011. THE JAPAN TSUNAMI HIT JAPAN RIGHT POINT BLANK, THEN TRAVELED ALL THE WAY ACROSS THE PACIFIC OCEAN AT ABOUT 500 MILES AN HOUR, AND THEN IT CAUSED DAMAGE IN BROOKINGS HARBOR, AND ALSO IN NORTHERN CALIFORNIA AND THERE WAS NEVER ANY WATER THAT WENT UP ONTO THE DRY LAND, BUT THOSE CURRENT HAD THIS WASHING MACHINE EFFECT AND BUSTED UP A BUNCH OF BOATS AND DOCKS. SO IN JAPAN, THE FARTHEST THAT I KNOW OF A TSUNAMI GOING UP A RIVER IS ABOUT 40 KILOMETERS. AND THAT'S A SITE WHERE ACTUALLY A SCHOOL WAS INUNDATED FROM TSUNAMIS AND ABOUT 70% OF THE SCHOOL CHILDREN DIED. IT WAS ONE OF THE NATIONAL TRAGIC SITES. IT'S ALWAYS BAD WHEN SCHOOL CHILDREN DIE.

>> Comm. Smith: THANK YOU.

>> Comm. McKeel: FOR THE PRESENTATION. VERY INTERESTING. SHALL WE SAY. I -- YOU KNOW, I KNOW WE'RE LOOKING AT THE BIG ONE HERE, I ALSO HAVE CONCERNS ABOUT WHAT HAPPENS IN A 5.0, 6.0 SIZE EARTHQUAKE AS WELL FOR US HERE IN MULTNOMAH COUNTY. BUT MY REAL -- I'M JUST SITTING HERE TRYING TO THINK, WHAT'S EAST OF THE SANDY RIVER THAT IS IN OUR COUNTY, AND OF COURSE THE SANDY RIVER BRIDGE IS BEING BUILT, IT'S BRAND-NEW, SO I THINK THAT'S IN GOOD SHAPE. BUT I -- I'M SURE BONNEVILLE MUST HAVE DONE ALL KINDS OF STUDIES ON WHAT WOULD HAPPEN TO BONNEVILLE DAM.

>> THEY'RE ACTUALLY JUST STARTING TO EVALUATE THAT. THE SEISMIC STABILITY OF THE BONNEVILLE DAM BY THE CORPS OF ENGINEERS.

>> Comm. Shiprack: PERFECT. SO I WOULD --

>> Comm. McKeel: PERFECT. I WOULD LIKE THAT INFORMATION WHEN WE HAVE, SINCE IT IS IN MULTNOMAH COUNTY I WOULD BE INTERESTED TO SEE WHAT THEY COME OUT WITH. THANK YOU.

>> Comm. Shiprack: THANK YOU SO MUCH FOR THIS PRESENTATION. IT'S FASCINATING TO ME, WHEN ENGINEERS AND BUDGET PEOPLE AND PUBLIC POLICY PEOPLE ALL GET TOGETHER IN THE SAME ROOM, BECAUSE REALLY THE CHALLENGE TO GET TO WHERE WE NEED TO BE INCLUDES ALL OF THOSE AREAS, AND A COUPLE OF QUESTIONS, WHAT IS IMPORTANT, AND WHAT IS THE PERSUASIVE CASE ARE QUESTIONS THAT ALSO FEED INTO NEEDING TOOLS TO HELP US PRIORITIZE. AND THIS ISN'T THE ONLY TOPIC WHERE THAT IMPORTANT PRIORITIZATION COMES IN TO PLAY. BUT I HAVE TO SAY THAT ONE -- JUST HUMAN NATURE FITS INTO THIS, WHICH IS THAT THIS IS NOT A TRUE CASE, BUT LET'S JUST SAY HYPOTHETICALLY EVERY DAY I BACK OUT OF MY DRIVEWAY INTO A ROAD THAT'S OWNED BY THE CITY OF PORTLAND AND MANAGED BY THEM, AND I HIT THE SAME POTHOLE. AND I'M REALLY UPSET ABOUT IT. AND I REALLY WANT THAT POTHOLE FIXED. NOW. THAT KIND OF PROBLEM THAT IS SO PRESENT AND THERE MAY BE A POTHOLE FOR EVERYBODY ON MY STREET. AND THAT WE DEAL WITH EVERY

SINGLE DAY. THAT BECOMES A PRIORITY. AND I THINK THAT JOB THAT YOU'RE DOING IN ADVOCACY IS REALLY HOPEFUL BECAUSE -- I DON'T NEED TO SAY BECAUSE, IT'S JUST VERY HELPFUL. AND IF IT LEADS TO OUR ABILITY TO MAKE IMPROVEMENTS TO OUR BRIDGES, FOR EXAMPLE, JUST FOR ONE EXAMPLE, THOSE ARE BRIDGES THAT WERE PROBABLY PROCURED FOR MAYBE A 75-YEAR LIFE SPAN 100 YEARS AGO. THERE ARE -- THEY'RE KIND OF AT THEIR AGE LIMIT ANYWAY. SO WHETHER THEY WERE ENGINEERED FOR A MAJOR SEISMIC EVENT, WHICH THEY WEREN'T, OR NOT, IS ALMOST NOT THE QUESTION, BUT IT MIGHT BE THE TIPPING POINT FOR OUR ABILITY TO GET THE PUBLIC WILL TO DO SOMETHING ABOUT IT. SO I REALLY DO APPRECIATE THAT YOU ARE SHOULDING LIGHT ON THIS REALLY PROFOUNDLY QUIET POTENTIAL DISASTER, AND I THINK THAT YOU'VE MADE A LOT OF PROGRESS IN THE PAST FEW YEARS OF DRAWING ATTENTION TO THAT, AND I ALSO THINK THAT WE NEED TO CONCENTRATE ON OUR BRIDGES WITH OR WITHOUT A 9.0 SUBDUCTION ZONE EARTHQUAKE HAPPENING. I JUST WANT TO THANK YOU FOR THE HELP.

>> IT'S OUR PLEASURE. WITH AMASS THIS KNOWLEDGE AND IT'S THE GREATEST OPPORTUNITY WHEN WE CAN SHARE IT WITH DECISION MAKERS AND LEADERS LIKE YOU, SO THAT YOU AS ELECTED OFFICIALS CAN MAKE THE BEST DECISIONS FOR US RIGHT NOW. THE IMMEDIATE POT HOLE TYPE PROBLEM, AND ALSO IN THE DISTANCE WITH THE VISION FOR THE FUTURE. WE'RE HERE TO STAY. SO I KNOW IT'S A TOUGH BALANCE, IT'S KIND OF LIKE WHEN THE COMPANIES ALLOT A CERTAIN AMOUNT OF MONEY FOR RESEARCH DOLLARS TO HELP THEM BRING IN FUTURE BIG NEW IDEAS AND BUSINESS IN THE FUTURE, I THINK THAT WITH THINGS LIKE EARTHQUAKE THREAT, WHICH IS -- IT'S 100% IT'S GOING TO HAPPEN. IT'S JUST, WILL IT HAPPEN ON YOUR WATCH, OR A FUTURE GENERATION OR A DIFFERENT WATCH. AND IT'S IMPORTANT TO -- WITH THE KNOWLEDGE THAT WE HAVE TO ACTUALLY FIT IT IN SOMEWHERE IN THE PLAN RATHER THAN LETTING IT GO. AND ASKING OTHERS TO JOIN IN THE HELP, BECAUSE THESE ARE EXPENSIVE AND IMPORTANT THINGS, I THINK IS THE WAY TO GO. THERE ISN'T A TON OF MONEY OUT THERE. ENGINEERS, YOU KNOW, CAN'T HELP YOU WITH THE BUDGET AND THAT KIND OF THING, BUT WE CAN HELP YOU WITH BENEFIT COST ANALYSES, AND RISK MANAGEMENT. SO WE CAN HELP WITH WHAT IS IMPORTANT TO FIX, VERSUS -- WE CAN IDENTIFY A BUNCH OF SEISMIC VULNERABILITIES. I WOULD SAY THERE ARE LOTS OF SEISMIC VULNERABILITIES OUT THERE, BUT WE CAN DO BETTER THAN THAT. WE CAN TELL YOU WHAT'S IMPORTANT TO ACTUALLY BE UP AND RUNNING, AND IF IT'S WORTHWHILE TO FIX THROUGH BENEFIT COST ANALYSES. AND I'M SURE THAT YOUR FOLKS HERE HELP YOU DO THAT.

>> Comm. Shiprack: AS -- NOT REALLY OFFLINE, BUT JUST AS A REQUEST, IF YOU IN YOUR STUDIES OF THE EARTHQUAKE IN CHRIST CHURCH OR CHILE, OR JAPAN, HAVE COME ACROSS WHAT IT LOOKS LIKE WHEN AN EARTHQUAKE DAMAGES A BRIDGE THAT IS HEAVILY USED FOR BIKE COMMUTERS, THAT WOULD BE I THINK A GOOD LEARNING TOOL FOR US TO HAVE.

>> THERE IS A LOT OF INFORMATION OUT ON THAT, AND I THINK THAT YOUR NEXT SPEAKER, STEVE, WILL BE TALKING ABOUT THAT. ONE OF THE THINGS WITH ALL THESE MOVABLE BRIDGES IS THAT MOVABLE BRIDGES DO BADLY IN EARTHQUAKES. BECAUSE THEY'RE NOT DESIGNED TO SHAKE Laterally. THEY'RE DESIGNED -- THE GEARING, YOU KNOW, JUMPS IN GENERAL. SO IT'S VERY WELL ESTABLISHED THAT MOVABLE BRIDGES -- LIKE THE ONES THAT GO UP AND DOWN AND OPEN, DO POORLY IN EARTHQUAKES.

>> Comm. Shiprack: THIS IS MAYBE MORE -- WE DON'T WANT TO OVERWHELM ANYBODY'S TOLERANCE LEVEL -- I JUST WANT TO SAY THAT PART OF THIS IS ALSO HUMAN NATURE AND HOW WE RESPOND TO THREATS. AS HUMAN BEINGS. AND IF YOU WERE TALKING ABOUT A VIRUS THAT WAS HIDING OUT THAT WAS GOING TO FOR SURE GOING TO BLOOM IN THE NEXT 50 YEARS, BUT WE JUST DIDN'T KNOW WHEN, BUT WE KNEW THIS WAS GOING TO BE SERIOUS, AND THIS WAS GOING TO CAUSE A LOT OF LOSS OF LIFE, YOU KNOW, I THINK THERE ARE COMPARABLE SORT OF SCENARIOS THAT INVOLVE DIFFERENT KINDS OF THREATS THAT ENGAGE A MUCH MORE URGENT RESPONSE, AND JUST FOR SOME REASON WE'VE JUST GOT THIS ONE. AND PART OF THE ADVOCACY IS MAKING THE RESPONSE MATCH THE LEVEL OF RISKS WE'RE LIVING WITH. THANK YOU. I'M DONE.

>> Chair Kafoury: THANK YOU VERY MUCH FOR THIS PRESENTATION. JUST BECAUSE SOME OF THE -- MY COLLEAGUES WERE NOT HERE FOR THE SHAKEOUT DRILL LAST WEEK, YOU'RE MORE THAN WELCOME TO CLIMB UNDERNEATH THE DAIS IF YOU'RE INTERESTED. THANKS SO MUCH FOR COMING TODAY. OUR NEXT PRESENTATION IS ON FLEET SERVICES. I KNOW WE'LL HAVE ANOTHER BRIEFING ON THIS ON BRIDGES COMING UP NOVEMBER 6th. SO STAY TUNED. MORE FUN NOVEMBER 6. NOW WE HAVE OUR FLEET FOLK COME ON UP, PLEASE. GOOD MORNING.

>> GOOD MORNING.

>> Chair Kafoury: DO YOU HAVE PICTURES THAT MATCH THE TSUNAMI ONES? OTHERWISE --

>> I DON'T THINK WE CAN --

>> OUR HIGHLIGHTS ARE MUCH LESS DRAMATIC, I'M SORRY TO SAY.

>> Comm. McKeel: AND MAYBE WE'RE THANKFUL ABOUT THAT.

>> GOOD MORNING. I'M SHERRY SWACKHAMER, THE DIRECTOR OF THE COUNTY OF -- THE DEPARTMENT OF COUNTY ASSETS. WE'RE HERE TO TALK ABOUT OUR FLEET SERVICES PROGRAM. IT'S A FOLLOW-UP TO A BUDGET NOTE. WE'RE GOING TO BE TALKING ABOUT JUST OVERALL WHAT IS OUR FLEET SERVICES PROGRAM TO KIND OF GET EVERYONE AT THE SAME PLACE. THEN WE'LL BE TALKING ABOUT A COUPLE OF UPDATES, ONE THE WORK WE'RE DOING WITH THE CITY OF PORTLAND, AND THEN THE SECOND UPDATE AROUND THE ONE-TIME-ONLY PROGRAM OFFER AND WHERE WE

ARE WITH THE REPLACEMENTS. I THINK ALL -- SOME OF YOU WILL RECALL THAT A COUPLE OF YEARS AGO WHEN WE CREATED THE DEPARTMENT OF COUNTY ASSETS, WE INCLUDED FLEET RECORDS, DISTRIBUTION ALL IN THAT DEPARTMENT. AND WHEN WE LOOKED AT FLEET WE FOUND THAT IN THE MANY YEARS OF BUDGET CUTS THAT WE'D HAD, THAT THE FLEET PROGRAM HAD SOMEWHAT BEEN NEGLECTED OR HURT FROM THAT, THAT DEPARTMENT TO MAKE REALLY HARD CHOICES AND THAT MANY OF THE VEHICLE REPLACEMENTS HAD NOT HAPPENED. SO WE ASKED GARRET VANDERZANDEN, WHO YOU'LL HEAR FROM IN A MINUTE, TO STEP IN AND REENERGIZE THAT PROGRAM AND I THINK HE'S DONE -- AND KIND OF LOOK AT ALL POSSIBILITIES, AND I THINK HE'S DONE A GREAT JOB. AND SO GARRET IS HERE WITH ME, HE'S OUR PROGRAM MANAGER, AND THEN TONY DORNBUSCH IS OUR SENIOR FINANCE MANAGER WHO IS OVER FLEET AND MANY OTHER THINGS FOR US. SO GARRET IS GOING TO DO THE PRESENTATION, AND TONY AND I ARE HERE TO SUPPORT HIM AND ANSWER QUESTIONS.

>> GOOD MORNING, CHAIRS, COMMISSIONERS. SO WE'RE JUST GOING TO DO A QUICK RUNDOWN OF WHAT THE PROGRAM OVERALL IS AND KIND OF WALK THROUGH CONTEXT WALL PIECES, THE BUDGET, WHO OUR CUSTOMERS ARE, TALK ABOUT WHAT THE LIFE CYCLE IS FOR FLEET ASSETS, WHICH WILL GIVE YOU A PICTURE OF WHAT HAPPENS AT THE BEGINNING, WHEN WE'RE -- WE HAVE THE VEHICLES ON THE ROAD AND WHAT HAPPENS WHEN THEY'RE AT THE END OF THEIR LIFE, TALK ABOUT WHERE WE'RE AT IN TERMS OF THE THINGS THAT WE'RE WORKING ON FOR THE FUTURE IN TERMS OF SOME. DEFENDANT THAT SHERRY TALKED ABOUT, AND THEN ALSO THAT ONE-TIME-ONLY FUNDS EXPENDITURE UPDATE. FIRST OFF, THIS IS A PICTURE JUST OF OUR OPERATIONAL BUDGET. OUR NEXT SLIDE INCORPORATES OUR REPLACEMENT FUNDING COMPONENT. THIS IS JUST A BREAKDOWN BY THE TYPE OF COSTS ASSOCIATED FOR THE EXPENDITURES FOR FLEET. WE HAD A PRETTY SIGNIFICANT CHANGE IN FY 14, SOMEWHAT RELATED TO THE CITY OF PORTLAND WORK WE'VE BEEN DOING WHERE WE HAD STAFF REDUCTION THROUGH VACANCIES ONLY THAT BASICALLY WITH OUR SHOP CLOSING DOWN THAT SHIFTED SOME OF THE COSTS OVER TO OUR CONTRACTS BECAUSE A LOT OF THE WORK ENDED UP AS YOU'LL SEE IN A FUTURE SLIDE THE WORK SHIFTED TO THE CITY OF PORTLAND SO IT ENDED UP BEING A SHIFT IN TERMS OF OVERALL COSTS TO THE PROGRAM.

>> Comm. Smith: I HAVE A QUICK QUESTION. UNDER MATERIALS AND SUPPLIES, DOES THAT INCLUDE THE ACTUAL FLEET, OR IS THAT A SEPARATE LINE ITEM?

>> WHEN YOU SAY ACTUAL FLEET --

>> Comm. Smith: IS IT ACTUALLY THE CARS, UNDER MATERIALS AND SUPPLIES?

>> UNDER MATERIALS AND SUPPLIES IS ACTUALLY ALL THE PARTS THAT WE WOULD USE TO SERVICE THE VEHICLES, WHETHER -- OR REPAIR. SO OIL --

>> Comm. Smith: NOT THE ACTUAL VEHICLE?

>> CORRECT. AND THE BIGGEST, SINGLE BIGGEST COST IN OUR MATERIALS IS FUEL. SO I THINK LAST YEAR WAS ABOUT 1.2 MILLION THIS, YEAR WE'RE PROJECTING IT'S GOING TO BE ABOUT 1.1 MILLION. SO IT'S A PRETTY SIGNIFICANT SHARE OF THAT AS YOU CAN IMAGINE JUST THE AMOUNT OF MILES WE DRIVE. THIS SLIDE IS A QUICKER VIEW OF HOW FROM A BUDGETARY STANDPOINT WHO CONSUMES OUR ASSETS AND ON THE LEFT SIDE YOU'LL SEE THE COURAGES BY THE NUMBER OF UNITS THEY HAVE DEPLOYED IN THE FIELD. SO ONE THING TO -- THAT YOU MIGHT NOTE HERE IS THERE ARE SOME INSTANCES WHERE THERE SEEMS TO BE A DISPARITY BETWEEN THE NUMBER OF UNITS THAT WE HAVE IN SERVICE VERSUS THE OVERALL BUDGET COMPONENT. AND THAT'S BECAUSE WE HAVE VERY DIFFERENT NEEDS FROM OUR PROGRAMS IN TERMS OF WHAT KIND OF VEHICLES OR ASSETS THEY HAVE-TO-DEPLOYED. SO WITH THE SHERIFF'S OFFICE, THEY HAVE A SIGNIFICANT COMPONENT OF THEIR FLEET OF PATROL VEHICLES. THEY'RE AVERAGING AROUND 21,000 MILES A YEAR BEING DRIVEN SO WE'LL SEE THEM MORE FREQUENTLY BECAUSE THEY JUST DRIVE A LOT MORE AND IT'S EXTREME USE. SO WE'RE GOING TO BE SPENDING A LOT MORE MONEY ON PARTS, ON REPAIRS, ON MAINTENANCE. AND SO THEY HAVE WHAT LOOKS LIKE A DISPROPORTIONATE SHARE BUT IT'S BECAUSE IT'S THE TYPE OF USE THEY HAVE FOR THAT EQUIPMENT. AND WE'RE GOING TO -- WE'LL GO THROUGH THE BEGINNING, MIDDLE, AND END, AND GIVE DETAILS ON WHAT WE DO AT EACH OF THOSE STEPS. AND BY THE WAY YOU CAN'T SEE IT WELL, BUT THAT'S A VEHICLE WITH THE NEW COUNTY LOGO ON IT. I SHOULD HAVE MADE THAT BIGGER. SO FROM AN INITIAL PURCHASE STANDPOINT, WHAT WE DO TODAY IS WE USE A VARIETY OF DIFFERENT PROCUREMENT MECHANISMS TO GO OUT AND GET OUR EQUIPMENT. ONE OF THE THINGS WE'RE GOING TO SPEAK TO A LITTLE FURTHER ALONG IN THE PRESENTATION IS HOW THE LOCAL PURCHASING AND MWSBE COMPONENT IS A PART OF THIS. SO STATE OF OREGON CONTRACTS, WE USE THOSE COOPERATIVE AGREEMENTS FOR A LOT OF OUR SEDAN, VEHICLE, CARGO VAN, LIGHT-DUTY TYPE PURCHASES THAT ALLOWS US TO LEVERAGE VOLUME DISCOUNTS THAT GET US ABOUT NINE TO 28% IN TERMS OF OFF RETAIL, SO IF YOU WERE TO WALK INTO A SHOW ROOM AND SEE A PRICE YOU CAN ASSUME WE'RE PROBABLY GETTING A 9% DISCOUNT OFF THE RETAIL PRICE. BY MAKING USE OF THOSE CONTRACTS. WE ALSO HAVE COOPERATIVE AGREEMENTS THAT WE USE WITH LARGER PURCHASING ORGANIZATIONS TO GO OUT AND GET THINGS THAT ARE SPECIALIZED SUCH AS EQUIPMENT FOR ROAD MAINTENANCE THAT BECAUSE WE HAVE ONE OF THOSE THINGS LIKE A CHIP SPREADER THAT KICKS OUT ROCK TO GET OUR ROADS SEALED UP, THAT WE CAN ONLY BUY ONE OF THOSE AND WE MIGHT BE BUYING ONE IN 20 YEARS. SO WE HAVE NO LEVERAGING POWER THERE FROM A VOLUME STANDPOINT. AND WE'RE ABLE TO PARTNER WITH THOSE O.S TO GET A BETTER PRICE THAN WE WOULD IF WE DID IT ON OUR OWN. BIDS HERE IS WHERE WE -- WE LOOK AT WHAT WE'VE GOT COMING FORWARD FROM THE PROGRAM AND SEE IF THERE'S A WAY THAT WE CAN DO IT A LITTLE DIFFERENTLY IN TERMS OF

GETTING A BETTER RETURN. AN EXAMPLE IS WE HAVE FOR THE ROAD MAINTENANCE GROUPS, EXCAVATORS WE NEEDED TO BUY AND WE ALSO HAD UNITS ON HAND THAT THEY NEEDED TO DISPOSE OF AND THROUGH -- DOING A BID PROCESS WE ACTUALLY RECEIVED TWO EXCAVATOR UNITS AND WE WERE PAID \$15,500 BY THE VENDOR. SO IT WAS SOMETHING WHERE WE IN LOOKING AT IT WE BELIEVED WE GAINED AT LEAST ABOUT \$17,000 MORE THAN IF WE HAD DONE A MORE TRADITIONAL, WE'RE GOING TO DISPOSE OF IT, GO TO AUCTION, VERSUS GO OUT AND BUY IT PROCESS. ONE THING WE ALSO LOOK AT FIRST WHEN WE GO TO BUY IS, IS THE ASSET NEEDED. IT'S A REALLY BASIC CONVERSATION WITH SOMEBODY WHEN THEY SUBMIT SAYING HEY, WE HAVE A PROGRAM AND WE NEED A CAR. WE WANT TO MAKE SURE FIRST OF ALL THAT THEY ACTUALLY HAVE A NEED FOR THAT VEHICLE BECAUSE WE HAVE OTHER MECHANISMS SUCH AS OUR MOTOR POOL, WE HAVE OTHER LOANER VEHICLES THAT HAVE -- IF IT'S A SHORT-TERM NEED, MAYBE WE CAN PUT SOME -- THEM IN SOMETHING ELSE BUT IF IT LOOKS LIKE THEY'RE GOING TO HAVE A SIGNIFICANT NEED FOR THAT, WE HAVE PARAMETERS TO DECIDE WE'RE GOING TO GO OUT AND GET THIS VEHICLE. THEN --

>> WE DO THAT ALSO WHEN WE REPLACE VEHICLES. SO THAT'S THE FIRST QUESTION.

>> Comm. Smith: I'M LOOKING AT THESE THREE WAYS IN WHICH WE CAN PURCHASE VEHICLES. FOR THE MOST PART, COULD YOU PUT A PERCENTAGE ON WHEN WE ACTUALLY BUY THE VEHICLES, DO WE USE THE STATE CONTRACT -- THE MAJORITY OF THE TIME, OR WHAT'S THE PERCENTAGE OF HOW MUCH WE USE ALL THREE OF THOSE?

>> THE STATE CONTRACTS IS THE MAJORITY OF THE TIME.

>> Comm. Smith: THE MAJORITY OF THE TIME WE USE STATE CONTRACTS. GREAT.

>> ONE THING WE ALSO DO WHEN WE'RE LOOKING AT BUYING SOMETHING IS CUSTOMER INPUT. SO WE'LL SIT DOWN WITH OUR PROGRAMS AT A MINIMUM ON AN ANNUAL BASIS AND AS THE NEED COMES UP WE'LL READDRESS WITH THEM HOW THEY'RE UTILIZING THEIR CURRENT FLEET TO MAKE SURE THAT WE'RE NOT GOING TO GO OUT AND REPLACE LIKE WITH LIKE, AND MISS AN OPPORTUNITY TO MAYBE COME UP WITH A PRODUCT THAT'S GOING TO BETTER FIT THEIR NEED. AN EXAMPLE IS WORK WE DID LAST YEAR WITH DCH SOMEAGING AND DISABILITIES SERVICES WHERE THEY HAD A MID SIZE SEDAN FLEET THEY USED TO MOVE THEIR CLIENTS AROUND. A LOT OF TIMES THEY WOULD HAVE THINGS LIKE WHEELCHAIRS, SO THEN THEY HAD MID SIZED SEDANS BECAUSE THEY HAD A BIGGER TRUNK. IN TALKING IT THROUGH WITH THEM, AND PROVIDING THEM AN OPPORTUNITY TO ACTUALLY HAVE A TOUCH AND FEEL FOR A DIFFERENT VEHICLE, WE CALLED IT ROAD SHOWS WHERE WE BROUGHT OUT THEIR CURRENT FLEET AND ALSO BROUGHT ALONG SOMETHING NEW FOR THEM TO LOOK AT THAT MAY HAVE BEEN A BETTER FIT. WE WERE ABLE TO ACTUALLY BRING THEM TO

ROLLING OUT COMPACT HATCHBACK SEDANS WHICH DID A LOT OF GOOD THINGS FOR THEM, ONE, IT PROVIDED AN EASIER WAY TO GET THIS STUFF IN AND OUT OF THE VEHICLES, IT WAS A CHEAPER VEHICLE OUT OF THE GATE AND IT INCREASED THE FUEL ECONOMY. SO THOSE ARE THE THINGS THAT WE LOOK FOR WHEN PEOPLE ARE REPLACING THAN THE VEHICLES TO MAKE SURE WE'RE GOING TO FIT THE NEED AND, BECAUSE THERE MAY BE OTHER BENEFITS WE CAN GET OUT OF HAVING THOSE DISCUSSIONS. SO THIS GIVES A LITTLE BIT OF AN OVERVIEW OVER THE LAST COUPLE YEARS AS FAR AS WHERE WE'RE AT FROM A LOCAL PURCHASING MWSB STANDPOINT. WE FOUND IN DOING A LOOK AT, TAKING A STEP BACK AND SAYING HOW ARE WE BUYING THESE ASSETS, THAT WE HAD OPPORTUNITIES WITHIN THE CURRENT FRAMEWORK WHERE WE WERE TALKING ABOUT THE STATE OF OREGON CONTRACTS AND THE CO-OP AGREEMENT AND THE BIDS TO MAKE SIGNIFICANT CHANGE IN TERMS OF INCREASING THAT MWESB SHARED. WITH FY-14 WE HAD A 10% TO 90% NONMIX, AND THIS YEAR WE ANTICIPATE THAT'S GOING TO BE A LITTLE BIT CLOSER TO A 50. AND THAT'S BASED ON WHERE WE'RE AT TODAY IN TERMS OF THINGS WE ARE BUYING, WE HAVE MORE WE'RE GOING TO BE DOING DURING THE COURSE OF THE YEAR SO THAT NUMBER WILL CHANGE A LITTLE BIT, BUT WE THINK IT'S GOING TO BE ABOUT THERE. AND THE REASON WE WERE ABLE TO DO THAT IS SOME OF THE THINGS THAT HAVE COME OUT IN TERMS OF MANUFACTURERS MAKING CHANGES TO HOW THEY'RE DOING THINGS, AND BEING ABLE TO LEVERAGE SOME OF OUR PROGRAM DISCUSSIONS AND FINDING A BETTER FIT, IT'S BEEN A CONFLUENCE OF EVENTS THAT'S ALLOWED US TO DO A GREATER -- DO A BETTER JOB IN TERMS OF INCREASING THAT SPEND. AND SO THE MIDDLE GROUND ON THIS IS WHEN YOU'VE GOT THE VEHICLE OUT IN THE FIELD. WE HAVE OUR YEON SHOP IN EAST COUNTY, AND ONCE THOSE VEHICLES ARE DEPLOYED, OUR ROLE CHANGES FROM PROCUREMENT TO MAINTENANCE AND REPAIR. OUR MAINTENANCE SCHEDULES ARE SET BY MILEAGE OR TIME, SO AS I ALLUDED TO AT THE SHERIFF'S OFFICE, WE'RE GOING TO SEE THOSE VEHICLES MORE FREQUENTLY BECAUSE THEY TRAVEL A LOT FARTHER AND IN A SHORTER PERIOD OF TIME. AS OPPOSED TO SOMETHING LIKE A ROAD MAINTENANCE TRAILER, WHICH WE MIGHT SEE THAT ANNUALLY BECAUSE THE EXTREME DUTY, IT JUST DOESN'T GET USED AS MUCH AS THE OTHER ASSETS DO. SOME EXAMPLES OF REPAIR WORK THAT WE DO, TRANSMISSION WORK, WE ALSO HAVE A BODY SHOP WHERE IF ONE OF OUR COUNTY'S VEHICLES GETS INTO AN ACCIDENT, IT WILL DO TO THE BOYD SHOP FOR REPAIR AND IF IT'S SOMETHING WHERE IT LOOKS LIKE IT MAKES SENSE FOR US TO REPAIR THAT VEHICLE WE DOT WORK IN HOUSE. IN REGARDING CITY FLEET, WE HAVE ABOUT 280 UNITS THAT WE HAVE ON THE PROGRAM WITH THEM THAT WE SEND TO MAINTENANCE AND REPAIR. AND RIGHT NOW WE'RE STILL IN THE PROCESS OF EXPLORING AND EVALUATING OPPORTUNITIES TO POTENTIALLY INCREASE THAT MAINTENANCE WORK WITH THEM, BUT WE HAVE A PROPOSAL IN HAND FROM THEM AS FAR AS WHAT THAT WOULD LOOK LIKE AND WE'RE CURRENTLY EVALUATING THAT. SO AT THE END OF LIFE FOR AN ASSET, WE FIRST OFF WHEN A VEHICLE GETS TURNED IN BY A PROGRAM, OR A PIECE OF EQUIPMENT, WE LOOK AT THAT VEHICLE TO MAKE SURE IT DOESN'T HAVE ANY CONTINUED BENEFIT TO THE COUNTY TO RETAIN. WE'LL LOOK AT

THINGS LIKE THE MILEAGE AND LOOK AT THE REPAIR HISTORY TO SEE IF MAYBE WITH A DIFFERENT USE WOULD IT BE BEEN OFFICIAL FOR US TO HOLD ON TO AS OPPOSED TO GOING TO AUCTION. A RECENT EXAMPLE IS WE HAD A REQUEST FROM THE OFFICE OF SUSTAINABILITY FOR A WORK TRUCK FOR THE CROPS FARM IN ORDER TO TRANSPORT VEGETABLES BACK AND FORTH. AND WE HAD A PROGRAM THAT TURNED IN A TRUCK RECENTLY THAT HAD LOW MILEAGE, GOOD REPAIR HISTORY, AND SO IT MADE VERY GOOD SENSE BASED ON THE AMOUNT OF MILES THEY WERE GOING TO BE TRAVELING AND THE SHORT-TERM NEED TO HAVE THAT BE A VEHICLE THAT WE REASSIGNED TO THAT PROGRAM. WHAT WE ALSO DO IN THOSE KIND OF SITUATION ASSIST WE MAKE SURE WE FOLLOW UP WITH THAT PROGRAM SO IF IT LOOKS LIKE THAT SHORT-TERM NEED IS GOING TO BECOME A LONG-TERM NEED WE WANT TO MAKE SURE WE'RE PLANNING ACCORDINGLY SO WE HAVE THE REPLACEMENT FUNDS SHOULD WE NEED TO REPLACE THAT IF IT'S LOOKS LIKE A PERMANENT THING AS OPPOSED TO A SHORT-TERM FIX. WE ALSO LOOK AT SALES TO OTHER JURISDICTIONS. SO OTHER MUNICIPALITIES THAT MIGHT HAVE A NEED FOR A DUMP TRUCK OR SOMETHING ELSE. IF WE KNOW OF SOMEBODY THAT IS EXPRESSED INTEREST IN BUYING ONE OF OUR ASSETS, WE REACH OUT TO THEM AND WE DO THAT UNDER THE AUSPICES OF FAIR MARKET VALUE, SO IF WE'RE SELLING TO ANOTHER GOVERNMENT JURISDICTION WE'RE EXPECTING WE'RE GOING TO HAVE AN AGREEMENT THAT WILL GET US IN AS MUCH OF A BENEFIT AS WE WOULD IF WE WERE GOING TO PUBLIC AUCTION. FINALLY, WE GO TO PUBLIC AUCTION FOR OUR ASSETS THAT WE DEEMED END OF LIFE FOR THE COUNTY. WE DO THAT OVER THE PAST COUPLE YEARS WE'VE CHANGED THAT UP A LITTLE BIT IN TERMS OF LOOKING WHERE WE HAVE SPECIALTY VEHICLES AND TRYING TO FIND VENDORS THAT ARE A BETTER FIT IN TERMS OF MARKET SHARE AND HOW THEY GET THE INFORMATION OUT TO PEOPLE TO MAKE SURE WE'RE GOING TO GET MAXIMUM EXPOSURE AND MAXIMUM RETURN ON GETTING THAT PIECE OF EQUIPMENT TO AUCTION. THAT WAY WE HAVE SOME DIFFERENT WAYS WE CAN GET THOSE THINGS OUT THERE AND ENSURE THAT WE'RE NOT JUST ASSUMING WE'RE GOING TO GO WITH VENDOR X BECAUSE WE'VE ALWAYS DONE SO. FROM AN ONGOING STANDPOINT, WHAT WE'RE CURRENTLY DOING WITHIN FLEET IS BUILDING ON SOME OF THE STUFF THAT WE TALKED ABOUT EARLIER REGARDING ENSURING THAT WE'RE CONTINUING TO MEET WITH OUR CUSTOMERS ABOUT WHAT THEIR NEEDS ARE. FROM A STRATEGIC SOURCING STANDPOINT WE'RE LOOKING AT GOING OUT TO BID FOR VEHICLE PURCHASING TO AT A MINIMUM TEST THE MARKET SO WHEN WE TALK ABOUT STATE OF OREGON CONTRACTS, FOR SEDAN PURCHASING, AND LOOKING AT THOSE DISCOUNTS, DO WE HAVE ANY ABILITY TO BE AS COMPETITIVE IF WE LOOK AT THE COUNTY'S VOLUME AND HOW WE'RE LOOKING OVER A FIVE-YEAR PERIOD, WHICH WOULD THEN ALSO ALLOW US TO MAYBE HAVE A GREATER INFLUENCE OVER THAT MWESB COMPONENT AND THE LOCAL ECONOMY COMPONENT. SO IF THERE'S THE ABILITY FOR US TO NOT BE USING SOMEBODY THAT IS OUT IN HUBBARD, OREGON, VERSUS SOMEBODY THAT WE CAN GET PRICING COMPETITIVE HERE WITHIN THE COUNTY AND ALSO MWESB, WE WANT TO TAKE ADVANTAGE OF THAT. THE IDEA IS TO SEE WHERE WE HAVE THOSE OPPORTUNITIES. WE'RE ALSO

LOOKING AT THINGS LIKE LEASING. ONE OF THE THINGS THAT'S COME UP RECENTLY WITH ELECTRIC VEHICLES, THE TECHNOLOGY IS JUST CHANGING REALLY RAPIDLY, SO WHERE DOES IT MAKE SENSE FOR US ACTUALLY IN EVER INSTEAD OF BUYING SOMETHING, BECAUSE WE KNOW HOW KIND OF REALLY SIGNIFICANT THAT TURN IS ON THE TECHNOLOGY, WOULD WE BE BETTER SERVED TO LEASE IT KNOWING THAT WE'RE GOING TO HAVE SIGNIFICANT GAINS IN THE NEXT FEW YEARS THAT ARE GOING TO CAUSE THAT THING TO BE MORE EFFICIENT, TO DRIVE BETTER. IT'S NOT SOMETHING WE'VE LOOKED AT BEFORE BUT IT'S SOMETHING THE ELECTRIC VEHICLES SEEM LIKE A GOOD PLACE FOR US TO CHECK THAT OUT AND TEST IT TO SEE IS THAT A GOOD THING FOR THE COUNTY TO BE DOING, AND ALSO NEIGHBOR SEE WHERE THERE MIGHT BE OTHER OPPORTUNITIES LIKE THAT. SO WE'RE ALSO CONTINUING TO WORK ON BIDS FOR AFTER-MARKET EQUIPMENT. SOMETHING WE HAVEN'T DONE REAL WELL IN THE PAST, BUT LOOKING OUT FOR A SERIES OF YEARS IN TERMS OF BEING ABLE TO GO OUT AND GET BETTER RETURN ON BUYING THINGS LIKE CABINTRY FOR OUR FACILITIES CARGO VANS, SOMETHING THAT'S A \$3,000 CABINET PACKAGE WE CAN GET BETTER PRICING ON IT. THEN ALSO ALONG THE LINES OF E.V.s, DOING MORE EXPLORATION ON OTHER ALTERNATIVE FUEL OPPORTUNITIES, LIKE LIQUID NATURAL GAS AND OTHER THINGS THAT ARE STARTING TO BECOME A LITTLE MORE VIABLE IN TERMS OF AN ORGANIZATION LIKE OURS. AND THEN ONE OF THE OTHER THINGS WE'RE DOING THIS YEAR IS DOING AN ADMINISTRATIVE PROCEDURE REVIEW, IF YOU'VE EVER LOOKED THERE'S QUITE A FEW OF ADMINISTRATIVE PROCEDURES REGARDING FLEET. ONE OF THE SPECIFIC AREAS WE'RE LOOKING AT IS OUR UTILIZATION GUIDELINES. TO MAKE SURE THOSE GUIDELINES WE HAVE IN PLACE THAT ARE APPROXIMATELY SIX YEARS OLD NOW, TO MAKE SURE WE'RE BRINGING THEM FORWARD AND IF THEY STILL MAKE SENSE FOR THE COUNTY AND HOW THE COUNTY DOES BUSINESS. SO WHEN WE'RE HAVING CONVERSATIONS WITH OUR CUSTOMERS ABOUT HOW THEY USE THEIR VEHICLES, WE WANT TO MAKE SURE THAT WE'RE NOT ARTIFICIALLY ATTACHING SOME NUMBER TO, HEY, YOU NEED TO DRIVE IT 6,000 MILES OR TURN IT IN TO US. WE WANT TO MAKE SURE IT'S AN ACCURATE REFLECTION OF WHAT THE COUNTY NEEDS TO DO FROM A BUSINESS STANDPOINT SO IT MAKES SENSE FOR THE PROGRAM AND THE COUNTY FROM A DOLLAR STANDPOINT. AND THE LAST SLIDE BEFORE ANY ADDITIONAL QUESTIONS, THIS IS AN UPDATE ON THE ONE-TIME-ONLY FUNDS THAT WE RECEIVED BACK IN 2014, AND THIS IS REGARDING 81 ASSETS THAT WE HAD THAT DUE TO A GAP THAT SORT OF -- SHERRY ALLUDED TO THIS, WE HAD A GAP IN TERMS OF DELAYED REPLACEMENT THAT CAUSED A VERY DEFINITE GAP BETWEEN WHEN WE HAD COLLECTED THE MONEY TO REPLACE THEM AND WHEN WE WERE ACTUALLY GOING TO REPLACE THEM. BECAUSE AS WITH ANYTHING ELSE, THE COST OF IT IN 2004 IS NOT THE COST OF THAT TODAY. SO THERE WAS THAT -- SO WE LOOKED AT THOSE ASSETS THAT WE HAD ON HAND, AND LOOKED AT WHAT THAT MARKET VALUE WAS GOING TO BE TODAY, ALSO LOOKED AT ANYTHING THAT WE WOULD NEED TO DO WITH THE PIECE OF EQUIPMENT AFTER THE FACT, FOR EXAMPLE, GETTING CABINTRY THAT TYPE OF STUFF. AND CAME UP WITH A PLAN IN TERMS OF BRIDGING THAT GAP TO MAKE SURE WE COULD ACTUALLY GUESS THESE

VEHICLES IN SERVICE AND DO SO FULLY FUNDED AND NOT HAVE THIS GAP THAT WOULD FOLLOW US YEAR OVER YEAR OVER YEAR. SO THIS WAS THE FUNDS IN ORDER TO CLOSE THAT GAP, AND WHAT WE'VE DONE THUS FAR WITH THOSE FUNDS IS WE HAD AN AGGRESSIVE YEAR IN 2014 IN THAT WE REPLACED 40 UNITS, BECAUSE WE TOOK THE TACK OF GETTING THE SIMPLE STUFF DONE FIRST, BECAUSE WE WANTED TO GET AS MUCH AS WE COULD KIND OF OUT OF THE RUNNING IN TERMS OF HOLDING YEAR OVER YEAR, SO WE WERE ABLE TO DO THINGS LIKE SEDANS AND OTHER THINGS THAT WEREN'T COMPLEX FROM A PROCUREMENT STANDPOINT. SO WHAT WE'RE LOOKING AT FOR THE REMAINING TWO YEARS, THIS YEAR AND 2016, IS PROBABLY ABOUT A 20/20 UNIT BREAK, BECAUSE WE'RE GETTING INTO THE MORE COMPLEX STUFF THAT TAKES MORE TIME AND MORE MONEY TO MAKE SURE THAT WE'RE GOING TO BE GETTING THE RIGHT FIT FOR THE PROGRAM AND WITH THE SPECIFICATIONS, THINGS LIKE LIGHT BARS AND OTHER THINGS THAT GO ON THE VEHICLES THAT ARE DIFFERENT THAN IF YOU'RE JUST DRIVING A MOTOR POOL VEHICLE. AND ONE THING TO NOTE THAT WE'RE BEING VERY DELIBERATE ABOUT WHAT WE ARE DOING FROM A PROGRAM MANAGEMENT STANDPOINT TO MAKE SURE THAT WE DON'T EVER FIND OURSELVES IN THIS POSITION AGAIN. ONE OF THEM IS THOSE MEETINGS I ALLUDED TO THAT WE ANNUALLY SIT DOWN WITH OUR CUSTOMERS, WE ALSO THROUGHOUT THE COURSE OF THE YEAR ARE TALKING WITH THEM TO MAKE SURE THAT FROM A REPLACEMENT SCHEDULE STANDPOINT, NUMBER ONE WE'RE ESTABLISHING SOMETHING APPROPRIATE OUT OF THE GATE WHEN WE GET SOMETHING NEW, AND ALSO IF THERE NEEDS TO BE MODIFICATIONS MADE DURING THE LIFE OF THE VEHICLE THAT WE CAN DO THAT. AND ALSO WE'RE ROLLING OUT A MECHANISM BY WHICH IF BOTH THE PROGRAM AND FLEET DECIDES IT MAKES SENSE FOR A VEHICLE NOT TO ACTUALLY BE REPLACED SAY AT YEAR EIGHT OR NINE, A SET REPLACEMENT SCHEDULE ON THAT, THAT WE HAVE A WAY TO CONTINUE TO KEEP THAT VEHICLE IN SERVICE, BUT COLLECT ON INFLATION SO WHEN WE DO REPLACE IT, WE'RE FULLY FUNDED. IT MAY MAKE SENSE, THERE MAY BE FROM A PROGRAM STANDPOINT THERE MAY BE FUND ISSUES, IT MAY MAKE SENSE FROM A TECHNOLOGY STANDPOINT BECAUSE THERE HASN'T BEEN HUGE GAINS IN WHATEVER THAT PIECE OF EQUIPMENT MIGHT BE, IT MAY STILL BE IMMINENTLY SERVICEABLE, LOW MILEAGE, AND SO THAT WOULD BE WHERE WE WANT TO HAVE A MECHANISM SO THAT WE CAN TAKE THAT INTO ACCOUNT BUT MAKE SURE WHEN THEY DO BUY, THAT WE HAVE ALL THE FUNDS WE NEED TO DO THAT BY. AND THAT'S ALL THE SLIDES. QUESTIONS?

>> Comm. Smith: I HAVE A QUESTION OR TWO. CAN WE GO BACK TO THE SLIDE BEFORE THE QUESTION? I'M NOT QUITE CLEAR UNDER, IT SAYS FUND BREAKDOWN, IS THAT FISCAL YEAR '15, OR '16?

>> THIS IS A BREAKDOWN OF WHAT THE ONE-TIME-ONLY MONEY THAT WAS GIVEN TO US IN FISCAL YEAR 2014. IT WAS A THREE-YEAR PLAN, SO IT WAS FUNDS WE WERE GIVEN IN 2014 TO SPEND OVER THE COURSE OF THREE YEARS. AND SO WHAT THIS REPRESENTS IS THE BREAKDOWN OF PERSONNEL WHICH WE BUDGETED KNOWING THAT THIS WAS GOING TO BE

A SIGNIFICANT SPIKE IN ADDITION TO THE NORMAL WORK WE WOULD HAVE BEEN DOING FROM A REPLACEMENT STANDPOINT.

>> Comm. Smith: THES THAT ONE PERSON?

>> IT'S -- OVER THE COURSE OF THE THREE YEARS IT'S A ALSO LESS THAN ONE PERSON.

>> Comm. Smith: OK.

>> THIS REPRESENTS THE PROGRAM AUTHOR FROM 2014.

>> Comm. Smith: AND '15?

>> THE PROGRAM OFFER WAS APPROVED ORIGINALLY IN 2014, SO THAT'S WHAT THE FIRST CHART REPRESENTS. THAT TOTAL FUNDING. AND THEN THE SECOND CHART REPRESENTS HOW MUCH WE'RE SPENDING IN EACH OF THOSE THREE YEARS.

>> Comm. Smith: OF THE MONEY HERE UNDER THE ONE-TIME-ONLY FUNDING, HOW MUCH OF THAT HAVE WE SPENT ALREADY?

>> WE'VE SPENT THE FISCAL YEAR 2014 FIGURE, THE 360,000.

>> Comm. Smith: SO THIS IS THE ENTIRE '14, '15, AND '16 UNDER THE FUNDS BREAKDOWN.

>> CORRECT. THE I2014 REPRESENTS ACTUALS AND THE 2015-16 ARE BASED ON WHERE WE'RE AT TODAY.

>> Comm. Smith: I WAS LOOKING AT THE MWESB NUMBERS, AND I WAS THINKING HOW DO WE DO, THAT'S A HUGE AMBITIOUS JUMP FROM 10% TO 47%. AND IF WE'RE SPENDING THE MAJORITY OF OUR MONEY WITH STATE CONTRACTS, HOW DO WE REACH THAT VERY AMBITIOUS ASPIRATIONAL GOAL OF IMPROVING IT BY 37%?

>> A LITTLE BIT OF LUCK --

>> Comm. Smith: IT DOESN'T ADD UP TO ME. IF WE'RE NOT USING THE BILLY DALTO PIECE AS MUCH, I DON'T KNOW HOW WE IMPROVE UPON THAT BY 37%.

>> PART OF IT IS WHEN THE STATE DOES THEIR BID, THEY HAVE THAT AS PART OF THEIR COMPONENTS AS WELL.

>> Comm. Smith: SO WE CAN PUT ASPIRATIONAL LANGUAGE IN THERE?

>> THERE ARE MWSBE VENDORS ON THE STATE LIST.

>> Comm. Smith: IN TERMS OF US WHEN WE'RE CONTRACTING OUT WITH THE STATE, CAN WE ACTUALLY PUT LANGUAGE THAT WE WANT?

>> THEY HAVE A COLLABORATIVE PROCESS, LIKE WHEN THEY ACTUALLY GO OUT AND REDO THEIR BIDS, FROM THE NEXT CYCLE BY WHICH WE CAN PARTICIPATE, BECAUSE WE'RE PART OF THAT MEMBERSHIP THAT -- IT'S -- ORCCP IS THE ACRONYM. WHERE THEY WILL TAKE INPUT FROM US IN TERMS OF HOW THOSE BIDS GET DEVELOPED AND WHAT PRIORITIES ARE.

>> Comm. Smith: THANK YOU.

>> DOES THE COUNTY HAVE A SIGNIFICANT NUMBER OF DIESEL POWERED VEHICLES?

>> NOT SIGNIFICANT, NO. WELL, IT DEPENDS ON WHAT SIGNIFICANT MEANS. WE DO HAVE SOME ESPECIALLY IN OUR HEAVY EQUIPMENT SIDE, SO LIKE ON OUR ROAD MAINTENANCE SIDE AND SOME OF THE VEHICLES THAT YOU MIGHT SEE OUT ON THE ROAD FOR OUR SHERIFF'S OFFICE AND INMATE TRANSPORT. AND A LOT OF THAT IS SIMPLY BECAUSE OF THE SIZE OF THE VEHICLE AND WHAT'S REQUIRED OF THE VEHICLE IN THAT A GAS ENGINEERED EQUIVALENT AT THIS POINT DOESN'T EXIST. THERE ARE SOME ELECTRIC VEHICLE ALTERNATIVES THAT HAVE COME UP, LIKE YOU MAY SEE STAPLES TRUCKS THAT SAY I'M FULLY E.V. RIGHT NOW THERE'S A LOT OF MONEY YOU HAVE TO PAY FROM A DIFFERENTIAL STANDPOINT VERSUS THE MORE TRADITIONAL TECHNOLOGY, THOUGH COMPANIES LIKE UPS AND FEDEX ARE STARTING TO HELP BRING THAT DOWN A LITTLE BIT. BUT THERE'S STILL SOME BIG GAPS THERE. SO WE DO HAVE DIESEL, BUT IT'S VERY SPECIALIZED IN TERMS OF THE APPLICATION.

>> Comm. Bailey: HAVE YOU EXPLORED USING BIODIESEL IN THOSE VEHICLES?

>> WE FULLY HAVE ABOUT 5% BIODIESEL IN OUR CURRENT DIESEL MIX THAT WE PURCHASE.

>> Comm. Bailey: THAT'S THE MINIMUM.

>> BEYOND THAT, NO. NOT AT THIS POINT.

>> Comm. Bailey: I'D APPRECIATE A FOLLOW-UP IN MY OFFICE IF YOU WOULD DO SO. ON THE LOGISTICS OF HOW WE BOOST BIODIESEL PERCENTAGE IN OUR DIESEL VEHICLES.

>> Comm. McKeel: I WAS INTERESTED IN THE SAME THING FROM MAYBE AN ADDITIONAL PERSPECTIVE, WHICH IS I THINK IT'S FASCINATING THAT WE'RE BUYING VEHICLES ON SUCH A GRAND SCALE, BECAUSE AS JUST LITTLE CONSUMER, I ONLY DO THIS PERIODICALLY, SO SOME OF THE GRAND ANALYSIS ESCAPES ME. AND I DO THINK THAT IN MANY WAYS AS A COUNTY PURCHASER, WE GET HELD UP AGAINST THAT LITTLE SCALE BECAUSE OUR

COUNTIES MADE UP OF A LOT OF LITTLE PEOPLE LIKE US THAT DON'T PURCHASE ON THIS SCALE. SO ONE OF THE THINGS THAT I'M CURIOUS ABOUT IN TERMS OF ALTERNATIVE FUELS IS WHAT IS THE COST BENEFIT BREAKDOWN, AND HOW -- BETWEEN THE ADDITIONAL COST OF AN ALTERNATIVE ENERGY FUEL VEHICLE AT THE OUTSET, AND THEN THE KIND OF AMORTIZATION OF THAT COST UP AGAINST THE FUEL SAVINGS COST, THAT WAS PART ONE, AND PART TWO, I'M CURIOUS, DO WE PAY, WHEN WE AS COUNTY VEHICLE DRIVERS, WHEN WE DROP INTO OUR OWN FUELING STATION, WE DON'T PAY GAS TAXES.

>> ACTUALLY WE ACTUALLY DO PAY -- WE -- BULK FUEL, WE PAY A TAX ON THE BULK FUEL WE PURCHASE THROUGH THE STATE, THROUGH A STATE CONTRACT. AND I'LL -- IF THAT'S SOMETHING I CAN FOLLOW UP WITH YOU ON --

>> Comm. Shiprack: I'M CURIOUS ABOUT THE COST BENEFIT ANALYSES JUST BECAUSE I CAN'T AFFORD TO BUY AN ELECTRIC VEHICLE, THEY'RE GREAT, AND THE TECHNOLOGY IS IMPROVING, THEY'RE JUST REALLY EXPENSIVE AT THE OUTSET. BUT THE ANALYSIS IS, HOW MUCH MONEY DO I SAVE BASED ON A PER GALLON COST? AND I THINK THAT ANALYSES LIKE THAT ARE HELPFUL ON EVEN A BROADER RANGE THAN MY PERSONAL CURIOSITY. AND I THINK THEY ARE IMPORTANT IN TERMS OF THE COUNTY'S WHOLE PROGRAM. THE OTHER THING I'M REALLY VERY INTERESTED IN IS HOW DO WE GO ABOUT DECIDING WHO WE SELECT TO RESELL OUR VEHICLES ON THAT SECONDARY MARKET?

>> WE ACTUALLY HAVE ONE CONTRACT THAT WE WENT OUT TO BID A FEW YEARS BACK, SO IT WAS -- THIS ONE SPECIFICALLY WAS PRICED COMPETITIVE BID. SO IT'S SOMEBODY THAT LOCAL LI HAD WON THAT BID AND WE HAVE A CONTRACT THAT RUNS OUT IN A COUPLE YEARS WITH THEM. THAT WAS THE COUNTY BID PROCESS THAT WAS IN PLACE, OR IS IN PLACE CURRENTLY. WE ALSO DECIDED THAT WE NEEDED TO TAKE A LOOK AT ALTERNATE SUPPLIERS IN TERMS OF THEIR SPECIALTY APPLICATION IN TERMS OF WHO THEY WERE ABLE TO MARKET THE MATERIAL TO. AND IT'S NOT THAT SPECIFIC A VENDOR WAS THROUGH THE CITY OF PORTLAND SO THERE WASN'T ANY SPECIFIC MULTNOMAH COUNTY MWESB COMPONENTS TO THAT.

>> Comm. Shiprack: IT'S STARTING TO FEEL LIKE THAT WHOLE EXPERIENCE OF BUYING A CAR, WHICH HAS NEVER BEEN MY FAVORITE. BUT THOSE ARE THE KINDS OF CALCULATIONS, DO WE HAVE THE BEST PRICE FOR THE USED CAR, AND DO WE GET PRICE FOR THE NEW CAR, AND WHAT ARE OUR CRITERIA FOR BUYING THE NEW CAR, IS IT BECAUSE IT'S THE NEWEST TECHNOLOGY AND WE WANT TO SHOW IT OFF ON THE STREET, OR IS IT BECAUSE IT'S THE MOST COST BENEFICIAL TO US OR IS IT A BLEND OF ALL OF THOSE?

>> THE SHORT ANSWER IS IT'S A BLEND OF ALL OF THOSE.

>> Comm. Shiprack: THAT'S KIND OF WHAT I THOUGHT. SO I'M GOING TO STICK WITH MY QUESTION AND JUST SEE, SO WHERE'S THE BALANCE POINT ON THAT BLEND, AND IS THAT A POLICY THAT YOU MAKE ALL BY YOURSELF, OR IS IT A POLICY THAT GETS SHARED AT SOME POINT WITH THE BOARD? MY INTEREST HISTORICALLY IS ALSO WHERE THE VEHICLES THAT WE DRIVE MADE. ARE THEY MADE IN KOREA ARE THEY MADE IN JAPAN, ARE THEY MADE IN MEXICO, ARE THEY MADE IN AMERICA?

>> WE HAVE HAD BOARD --

>> Chair Kafoury: WE HAVE HAD BOARD DECISION MAKING INTO THAT, A FEW YEARS AGO OUR BOARD VOTED SPECIFICALLY TO PURCHASE ELECTRIC VEHICLES, AND IT WAS -- WE HAD A ROBUST DISCUSSION ABOUT THAT. AND I DON'T KNOW THAT WE EVER SAW ANY RETURN ON INVESTMENT TYPE RISK -- ANALYSIS. SO THAT WOULD BE INTERESTING TO SEE.

>> Comm. Shiprack: THANK YOU.

>> Comm. McKeel: THANKS FOR THE PRESENTATION. I THINK I'M THE ONE THAT ASKED FOR THIS PRESENTATION. SO I APPRECIATE IT. IT'S A LOT OF WORK GOING ON, I APPRECIATE THAT VERY MUCH. I THINK ONE OF MY ORIGINAL QUESTIONS AROUND THIS WAS GOING BACK TO -- AND I'M GOING BACK NOW, TO THE -- I THINK PART OF WHAT CAME OUT OF THAT WAS THAT OUR CONTRACTING WITH THE CITY OF PORTLAND ON SERVICES WOULD BE A COST SAVINGS TO US. SO MY QUESTION IS AROUND THAT. HAVE WE REALIZED THAT COST SAVINGS THAT WE THOUGHT WAS GOING TO HAPPEN WHEN WE CONTRACTED TO THE CITY OF PORTLAND FOR SERVICES, OR HAS THERE BEEN ANOTHER DIFFERENT BENEFIT THAT WE FOUND OUT?

>> I THINK WE WERE ABLE TO REDUCE THAT, SO WE SAW SOME SAVINGS FROM THE REDUCTION IN STAFF. I THINK BECAUSE WE'RE STILL EVALUATING THEIR TOTAL PROPOSALS FOR TAKING OVER, WE HAVEN'T COMPLETED THAT EVALUATION. I THINK ON -- I DON'T THINK IT'S GOING TO BE SIGNIFICANT SAVINGS, AND I THINK EVEN THEN WE WERE LOOKING AT MAYBE A HALF MILLION, AND AGAIN WE JUST GOT THEIR LATEST PROPOSAL SO DON'T HOLD ME TO THAT. I THINK THERE MAY BE SOME OTHER REASONS TO DO IT ALSO BESIDES JUST COST SAVINGS. I THINK THEY'RE INTERESTED IN TALKING TO THEIR NEW CHIEF ADMINISTRATIVE OFFICER THERE, THEY ARE INTERESTED AT POTENTIALLY BEING A MORE REGIONAL PROVIDER, SO IF THEY WERE TO DO THAT AND DRIVE DOWN COSTS FOR EVERYONE, I THINK THERE'S SOME REASON TO PARTICIPATE IN THAT. IF THEY DO THAT THERE MAY BE SOME INTEREST ON THEIR PART TO USE OUR YEON SHOP TO DO THAT, THAT COULD ACTUALLY CHANGE THE OVERHEAD MAKEUP, WHICH I THINK WOULD BE VERY BENEFICIAL TO THE COUNTY. BECAUSE THAT'S A HUGE BUILDING, IT'S EXPENSIVE, IT TAKES A LOT OF CAPITAL. AND SO WE'RE TALKING TO THEM ABOUT THINGS LIKE THAT. I THINK WE ARE -- WE HAVE SAVED THE FTEs AT THE BLANCHARD SHOP. I THINK BESIDES THAT IT'S A BREAK-EVEN SITUATION AND WE'RE LOOKING AT WHAT THEIR LATEST PROPOSAL IS.

>> Comm. McKeel: THANK YOU. I ALWAYS HAVE CONCERNS WHEN WE CONTRACT SOMETHING OUT, SO I LIKE TO KEEP ON TOP OF WHAT'S HAPPENING IN THOSE SITUATIONS. THANK YOU.

>> Comm. Smith: I JUST HAVE A QUICK QUESTION. SHERRY, YOU HAVE TO FORGIVE ME FOR STILL HAVING THIS EARTHQUAKE PREPAREDNESS ON MY MIND. AND I WAS JUST THINKING THAT PROBABLY ONE OF THE BIGGER ISSUES THAT WE'RE PROBABLY GOING TO HAVE IS WHAT WE DO WITH OUR DEBRIS AFTER A A CASCADIA SUBDUCTION ZONE EARTHQUAKE. I WAS THINKING, HOW MANY CARS DO WE OWN?

>> WE HAVE 718 VEHICLES.

>> Comm. Smith: 718 VEHICLES. IF WE HAVE THIS BIG MASSIVE EARTHQUAKE, WHAT DO WE DO WITH THE DEBRIS, PARTICULARLY FROM AN ENVIRONMENTAL STANDPOINT, OF THE CARS THAT COULD POSSIBLY BE DAMAGED AFTER -- DO WE HAVE TO HAVE -- I WAS LOOKING AT THE RESILIENCY PLAN AND THEY WERE SAYING COUNTIES HAVE TO HAVE DIFFERENT PLANS, AND I WAS WONDERING IF OUR COUNTY ASSETS DEPARTMENT HAS TO HAVE A PLAN FOR DAMAGED VEHICLES IN AN EARTHQUAKE.

>> I DON'T BELIEVE WE HAVE ONE. AND I CAN'T REALLY ADDRESS IF WE HAVE TO, THEN I JUST THINK THAT THE PRESENTER BEFORE WAS TALKING, YOU KNOW, IT WOULD BE A WORTH WHILE PROJECT FOR THE COUNTY TO DO A RESILIENCY PREVENTION PLAN. WE'VE DONE QUITE A BIT OF WORK ON OUR CONTINUITY OF OPERATIONS, WHAT WOULD WE DO FROM THAT STANDPOINT, BUT I DON'T REALLY THINK THAT AS A COUNTY WE'VE LOOKED AT --

>> Comm. Smith: WE CAN TALK ABOUT THIS LATER. IT JUST CAME TO ME AS I WAS THINKING ABOUT THE FLEET, AND I WAS THINKING, WHAT ARE WE GOING TO DO WITH ALL THIS DEBRIS? WHERE IS IT GOING TO GO?

>> IT'S A VERY GOOD QUESTION. SOMETHING WE SHOULD LOOK AT.

>> Comm. Smith: THANK YOU.

>> WE DO HAVE A LANDER FILL, BY THE WAY.

>> Comm. Smith: I'M SURE IT'S GOING TO BE PRETTY BUSY.

>> JUST TEASING.

>> Chair Kafoury: THANK YOU. I LOOK FORWARD TO FURTHER FOLLOW-UP ON SOME OF THE QUESTIONS THAT WERE ASKED, AND ALSO HOW THE NEGOTIATIONS CONTINUE ON WITH THIS CITY ABOUT WHO'S GOING --

>> WE'LL COME BACK WITH YOU ON THAT.

>> Chair Kafoury: AND I ALSO JUST WOULD LIKE TO SAY I MISS THAT CHEVY MYSTIC THAT HAD THE CARPET ON THE DASH. I ALWAYS FELT SPECIAL WHEN I GOT TO DRIVE THAT ONE.

>> Comm. Bailey: I THOUGHT THIS WOULD BE THE FIRST TIME IT DIDN'T GET BROUGHT UP.

>> Chair Kafoury: SORRY. IT'S KIND OF OUR IMAGE AT MULTCO. ALL RIGHT. SEEING NO FURTHER BUSINESS, WE'RE ADJOURNED. [GAVEL POUNDED]

ADJOURNMENT

The meeting was adjourned at 11:49 a.m.

This transcript was prepared by LNS Captioning and edited by the Board Clerk's office. For access to the video and/or board packet materials, please view at:

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