

**OAK RIDGE CITY COUNCIL  
WORK SESSION  
Multipurpose Room, Central Services Complex**

February 16, 2016  
6:00 P. M.

AGENDA

- I. Follow-up on October 24, 2015 Oak Ridge City Council Advance.
- II. Council Representation in Engineering Firm Evaluation/Selection Process.
- III. Review of Broadcast Problems on Comcast/BBB Showing Votes of City Council.
- IV. Request by Councilmember Smith to Establish Committee Review of City Council Rules.
- V. Council Discussion, Review, Questions to DOE for Presentation and Response to City of Oak Ridge Letter on Proposed Landfill and Questions on Recent Economic Report.
- VI. Updates:
  - a. Change of March Work Session to March 22, 2016.
  - b. Extreme Energy Makeover grant and application program.
  - c. City Council Budget and Finance Committee update and review of meeting with Billy Casper Golf on Centennial Golf Course.

**Oak Ridge City Council Advance**

Saturday, October 24, 2015 8:30-2:00 PM

MCL INC Conference Facility at Heritage Center  
200 Heritage Boulevard (2010 Highway 58, Building K-1000)  
Oak Ridge, Tennessee

**ROADMAP FOR THE FUTURE OF THE CITY OF  
OAK RIDGE'S HOUSING  
AND CAPITAL INFRASTRUCTURE**

facilitated by

Christina Kloker Young  
of C.K. Young & Associates  
Creative Planning Systems  
208 Connors Circle  
Oak Ridge, Tennessee 37830

The material in this report is not the advice of Christina Kloker Young & Associates, but derives from the following list of participants from the Oak Ridge, TN City Council and staff, who participated in the advanced planning session October 24, 2015.

The following report is the result of a five hour planning session of the Oak Ridge City Council and executive staff of the City of Oak Ridge, TN.

The participants were asked to answer the following questions either signed or unsigned to assist the facilitator in the preparation of the agenda and assured the answers would not be shared. Many were interviewed in person upon request.

**WHAT ARE YOUR EXPECTATIONS OF THE TIME TOGETHER? WHAT HAVE YOU BEEN TOLD TO EXPECT?**

**WHAT DO YOU NEED TO HAVE ACCOMPLISHED FOR THIS TO BE A SUCCESS FOR YOU? WHAT IS THE PRODUCT YOU WANT PRODUCED?**

**AS THE SESSION CONCLUDES, WHAT WOULD BE THE CIRCUMSTANCES FOR YOU TO CONSIDER IT A FAILURE OR TIME WELL SPENT?**

**DO YOU HAVE ANY QUESTIONS, OR ANYTHING ELSE YOU THINK I NEED TO KNOW TO FACILITATE THIS ADVANCE.**

\*Due to limitations on time the issue of Capital Infrastructure was not discussed.

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**MEETING NOTICE**

**City Council Advance (Retreat)**

Notice is hereby given that a City Council Advance (Retreat) has been scheduled for Saturday, October 24, 2015 from 9:00 a.m. to 2:00 p.m. at the MCLinc Conference Facility at Heritage Center, 200 Heritage Boulevard, (2010 Highway 58, Building K-1000). The topic of the City Council Advance will include housing and capital infrastructure planning and will be facilitated by Christina Kloker Younger of C.K. Young Creative Planning Systems.

Diana R. Stanley, City Clerk  
CITY OF OAK RIDGE, TENNESSEE

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**List of Participants**

Warren Gooch, Mayor

Chuck Hope, Councilmember

Ellen Smith, Mayor Pro Tem

Rick Chinn, Councilmember

Kelly Callison, Councilmember

Charlie Hensley, Councilmember

Kathryn Baldwin, Community Development Department Head

Darryl Kerly, Chief of Oak Ridge Fire Department

Jim Akagi, Chief of the Oak Ridge Police Department

Mark Watson, City Manager

Ken Krushenski, City Attorney

Jon Hetrick, Parks and Recreation Department Head

Janice McGinnis, Finance Department Director

Jack Suggs, Electric Department Director and Interim Public Works Department Director

Amy Fitzgerald, Information Technology and Government Relations Department Head

Bruce Applegate, Assistant to the City Manager

**\*\*Councilmember Trina Baughn was not in attendance**

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**Agenda**  
**October 24, 2015**

8:30 Gathering

9:00 Welcome and introductions

Presentation of background information by City Staff

\*Distributed information is on file in the City Clerk's Office.

Facilitator Presents Purpose and non-purpose of session.

**Purpose of Session**

- To continue designing the future of Oak Ridge Housing and Capital Infrastructure
- For the Council to come to consensus on 3-4 key issues in priority, an action plan, and desired policies, they want to improve the Housing and Capital Infrastructure Issues
- To listen to staff/management review past decisions, issues and what they need from their perspective, before adding the key issues.
- For the Council to give clear expectations for the provision of City services.
- To have a healthy work session where respect for each other is shown and we listen to each other's thinking.
- To publicize what has resulted from the Advance
- To Review and discuss the Capital Investment Plan
- To have fun while thinking Big, Hairy, audacious ideas.

**Non-purpose of Session**

- To keep the status quo in the current housing market.
- To solve all the concerns or issues of the staff and council.
- To work on issues that are the jobs of staff.
- To re-write the current mission and vision statement

An introduction of the process suggested to be used from the Advance session

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The Advance opened with City staff giving background information and handouts by each of the staff managers.

### Staff/Managers Presentations

#### Fire Chief- Darryl Kerley

(A large map of the city had been prepared showing with a colored dot every house the ORFD went to in previous years with the number of visits to that address written on the dot)

- The focus today is primarily on legacy housing
- Several regions of poorly kept housing including those that are unseen and owned by "Hoarders"
- Fire Department receives over 5000 call per year
- Some addresses have over 20 responses for service
- Should we charge for medical calls?
- Majority of Fire calls occur in the central area of the city by residents age 15-50
- Calls for service in higher end areas are typically for senior citizen needs
- The city of Oak Ridge has an elderly population 9.5% above other cities
- Fire Hydrants located in the "Legacy Housing" area are on 70+ year old lines
- To upkeep the Fire Department's ISO rating testing of all hydrants annually is required. That testing leads directly to leaks from a large percentage of the old water lines.
- The construction of the city by the military also led to an overabundance of fire hydrants, which while beneficial for neighborhoods is expensive to upkeep.
- Residency requirements also are an issue due to a lack of quality/affordable housing.
- Firefighters are trying to purchase homes with income levels less than \$40,000
- Banks do not count firefighters overtime hours when determining loan qualification amounts\*
- The city is facing issues generating interest in staff positions due to poor housing stock/quality
- Majority of fire calls are from rental properties and aging population
- The city does not have a non-emergency 311 system
- It is required that all 911 calls be responded to
- Q: Does type of fire calls impact the overall mix of equipment held by the city
- A: Complex Industries in our area dictate the requirements of our fire vehicles and equipment
- All service provided from fire engines requiring 3 men per vehicle, allowing the team to save lives while waiting on an ambulance
- Comparing Oak Ridge to Farragut is not an appropriate comparison
- 911 dispatch determines whether to send ORFD or ORPD
- 5038 requests directed to fire department service: 18 structure fire, 50 other fire, 619 fire alarm, 3509 EMS, 774 Public Assist, 68 canceled

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### **Police Chief – Jim Akagi**

- Two forms of calls 1.) Instant Response and 2.) Calls for service
- ORPD has a 5 and a half minute response time; Farragut response times are closer to 15
- Average time spent on call/incident report is 79 minutes
- Hot spot for 911 service is central city
- Two types of calls 1) Service and 2) Crime
- Can't "not go" to any call
- Overage of calls come in that are not incident related
- Primary calls for service come from Highland View, Legacy Housing areas, and Central City
- Police Department has needed to increase tactical responses
- A tactical response requires 30 officers
- Reports that pull the most manpower tend to be in the legacy housing areas
- Reduced cost housing is drawing a criminal element
- Vouchers are not reported upon to City Offices
- Re-engaging on housing vouchers is a political opportunity
- City should increase its relationship with HUD
- People are not being honest about their use of HUD vouchers
- Roughly 370 total vouchers used in Oak Ridge: 166 ORHA, 88 ETHRA, 65 Lafollette, 53 TN
- Crooks love free and reduced housing
- Many people on free and reduced housing cause problems or shelter those who cause problems
- Court expense is tolling on community due to number of criminal prosecutions
- ORPD is currently focusing on the things it can control
- Morale boost is derived from the vehicle take home program
- Police Officers cannot afford to live in Oak Ridge
- Q: What should the city do about code enforcement on a known violent/mentally unstable individual?

### **Community Development – Kathryn Baldwin**

- Large # of structures valued at less than \$40,000
- Rental Property addresses correspond with hotspots for fire and police calls
- See Community Development Department Report 10/24/15
- Large number of rental properties in Legacy Housing Areas
- MDO stands for Manhattan District Overlay
- Majority of MDO homes were built during the World War 2 period
- Informally the MDO exists between the streets of Louisiana and East Dr.
- There is a large occupancy turnover visualized by utility disconnect data
- Disconnect numbers generated were prior to deposit requirement
- CDBG eligible area for use of fund expenditures
- Woodland was removed from CDBG eligible area
- The Not in Our City Program is a targeted approach at MDO housing issues

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- Not in Our City Program was heavily vetted, and included lots of public input
- Community Development adopted the property maintenance code in 2012
- Community Development also amended residential parking codes-boats, rv's, etc removed from curbside parking
- Since implementation there has been a reduction in complaints about parking issues
- An administrative Hearing Officer(AHO) position was established
- The AHO position changed \$50 dollar fine penalty to \$500 fine
- There has been difficulty in collecting AHO fines, but has increased the ability to place liens on violating properties
- Changes to code has also allowed for multiple citations
- Word on the street is 1) you will go to court and 2) you will be fined
- A re-addition of housing safety regulations has occurred
- Storage of inappropriate items on carport or porch can now be addressed
- Rental Registration program continues to evaluate MDO area
- Most recent Rental Registration Phase saw the registration of 637 new properties
- 50 interior inspections to date. Issues persist of determining ownership, heirs, etc.
- ID'ing rental properties- tax bill goes to different address
- 15,500 residential utility accounts/ 6300 of which are legacy units
- CDBG and EDM funds are used for blighted housing acquisition and demolition
- Demolition requires remediation before it can be demolished
- 14k is the normal cost to demolish a house, with an increase in cost if there are biohazards
- Anything that is sent to a hazardous landfill increases the overall cost of demolition
- Land Bank is a way for the city to get land and not just demolish housing
- There is a perceived issue of purchasing a substandard home for demolition, if it is owned by a landlord
- Community Development is working to rebrand failing neighborhoods through their Blight reclamation program
- Staff for Land Bank targets 1) property in disrepair in a decent area and 2.) critical mass consolidation (currently in w streets)

#### Electric Department – Jack Suggs

- Risk factors for new (utility)accounts: Green-solid citizens, Yellow-Half incidents, Red-Probably won't pay
- Red pays \$300 deposit, Yellow \$150, and Green \$0
- 5 years ago electric Department had \$175,000 in unpaid bills before deposit
- Currently there has been approximately a 75% reduction in uncollected utility bill debt
- The city has more bad risk accounts than good risk accounts
- Less Red customers are coming to more Oak Ridge as well as less Green Accounts
- Over 50% of utility connections can't establish good credit. A number that corresponds with free and/or reduced lunch
- A guesstimate of the number of homes receiving utilities but are turned off is roughly 400

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- 860 houses without power and 1200 units without occupant
- 10% of housing units are vacant :estimate

#### **City Manager - Mark Watson**

- Aaron Golds report indicates if nothing changes there will be a \$1000 drop in value annually per housing unit
- Average appraisal of 6300 legacy housing is \$73,900
- There are 6386 Legacy Houses in Oak Ridge
- Scarboro Legacies have a mean value of \$43k with a \$20k swing
- Current crime situation reduces ability to stabilize housing values
- How do we stabilize legacy home values for smaller homes
- Proximity to a greenbelt adds value to homes
- Violent Crime drastically affects house and neighborhood value
- Increased lot size yields an increase in value
- Fire and Police response times are closer to 20 minutes in Farragut and Hardin Valley
- TVA grant was received to reduce energy use in 250 homes by 25%
- ORFD has applied for grant to install residential sprinklers
- Large number of residents dependent on city services for safety
- 2010 Census 14,494 housing units, 1,772 vacant, 14.3% rental vacancy and 3.5% owner occupancy vacancy

#### **Assistant to the City Manager - Bruce Applegate**

- Presentation of Property tax comparison Data
- Through a straight cost comparison Oak Ridge has the highest combined city and county combined tax rate. Knoxville is the closest comparable tax rate
- Private contracting for services in Farragut lead to a comparable avg. tax rate of \$1.04
- Cost for private contracting services is regressive based on property values. Lower home values pay more than highest valued homes
- Comment by Police Chief: services of Oak Ridge compared to others is very impressive at the cost per citizen
- Oak Ridge is much more efficient in use of tax dollars for its city services
- ORFD responds to all 911 calls, KFD only responds to higher level calls
- ORFD chief believes: we need to be doing a better job as a city letting them know what a great level of service they receive
- Police Chief: The data makes it apparent we highly value our education and the level of services provided to our residents
- Comment Hensley: The Department of Energy should pay its fair share and let Oak Ridge become a Brentwood, TN?

#### **Parks and Rec – Jon Hetrick**

- Dispersed information on Parks and Recreation Capital Improvement Program

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- There is a backlog of work in the maintenance section of the CIP
- More Parks and Recreation infrastructure than other comparable cities
- What are the 1) Priorities, and 2) how do we pay for items not in the CIP
- Boys and Girls club are getting out of providing youth sports
- City is being asked to pick up boys and girls club sports programs

#### **Electric Department CIP(Jack Suggs)**

- Electric Department is facing a critical personnel issue
- Department is pushing out electrical capital expenditures due to a lack of personnel
- Critically worried about current public works software
- Finishing up big sewer projects as per administrative order
- Storm water rules are going to require a funding source
- Rules for storm water program will require vigilant observance
- Facilities : Central Services Facility needs a new roof at a cost of \$1 million
- Public Works is working to spread capital costs over future years
- Public works needs additional money for streets and potentially a 1 cent increase to do sidewalk work as well
- At the cities current sidewalk replacement schedule we will replace one sidewalk every 200 years
- Current approach to road repair is "point repair" due to lack of funding
- Q Smith: Can sidewalks be transferred back to responsibility of homeowners
- Electric department is failing to recruit and retain employees
- Oak Ridge is losing people to neighboring cities due to increased wage rate
- ORFD is facing similar issues with current staffing 10 positions short and the potential of losing 2 more soon
- Need for a hybrid personnel and compensation policy
- Personnel can only hear so much negativity before they decide to leave

#### **Government and IT dept.(Amy Fitzgerald)**

- Amy oversaw the combination of IT and Government Affairs Departments
- Increased Document management implementation across the city will yield benefits
- IT steering committee spans multiple departments
- Currently the city employs a 10 step payroll system which is costing the city money and efficiency
- The city has both internal and external customers
- Software selection is often dictated by other agencies as exemplified by TVA's software requirements
- The city has undertaken strategic investment in Emergency Management training
- The city has a need for a disaster recovery plan in the event communications go down

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- New ORPD software training led to the certification of employees as administrators
- Integration of policies and needs are critical for data management
- Utilities use the SCADA system
- How should we use the space in the Oak Ridge Schools data center?
- Can firestation 4 potentially have a data storage center to meet emergency management needs?
- Continuously evaluating cloud storage for data
- Cold storage is a less expensive cloud storage system for information that isn't routinely accessed
- Lots of questions exist as to the timelines for certain types of data and their retention
- Body Camera legislation will also require extensive data storage capabilities

#### **Finance Department (Janice McGinnis)**

- Debt vs. Cash evaluation material distributed
- Governmental funds= non-utility infrastructure
- Added \$260k to go up to \$610k to maintenance budget
- Need \$1.15 million for infrastructure maintenance
- New Debt Laws: Comptroller has to ok all debt that isn't level
- Current professional opinion is the city isn't providing adequate funding stream for high dollar maintenance items
- Can amortize debt over 30 years but must be level after first three years
- Without new debt everything will be paid off by 2024, except for school debt
- Comptroller's new approach will prevent filling in the peaks and valleys of debt
- Q Kelly: Are there rules or guidelines as to how much debt a city should have
- Oak Ridge is a very service heavy city causing Oak Ridge to hold more debt
- The city needs to be cautious what it plans to borrow for, but it will have to borrow
- We have run many items past the point where there are choices as to the method of payment
- Economic development is becoming much more critical for the success of the city
- Comment Kerley: Policy and ordinances are needed to solve enforcement issues
- Y-12/UPF will generate some sales tax and expenditures
- The city has been in a crisis mode for the past 5 years
- UPF will provide short term revenue
- 20 20 year old AC units on CSF
- Q : When do private facilities at DOE start dropping off ?
- A 2020's

Upon completion of staff presentations they were thanked as a whole, and presented the opportunity to leave.

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The facilitator explained the role of printers and each person's ability to write on pad in front of them.

An explanation of the way the group would work and its guidelines were made

The parking lot of ideas was also explained

#### **STORYBOARD #4 WHAT CAN THE COUNCIL DO TO IMPROVE THE HOUSING ISSUE?**

##### **PURPOSE OF STORYBOARD:**

**\*TO GENERATE MANY SUGGESTIONS FOR GOALS**

**\*TO CHOOSE 3-4 ATTAINABLE GOALS**

**\*TO COME TO CONSENSUS ON THE TOP GOALS**

##### **NON-PURPOSE OF STORYBOARD**

**\*TO RESOLVE ALL THE ISSUES IDENTIFIED BY THE BOARD**

**\*TO DISCUSS A PLAN FOR EACH ISSUE**

##### **Getting Councils view of Housing/ Infrastructure Issues**

- (Comment Kelly): Have lots of opportunities need plan
- Negativity has got to go away
- (Comment Charlie): We need to remove negativity , support our schools, and speak well of our city leaders
- (Comment Chinn): We have great marketing to low end, how do we market to high end? We need better housing and better shopping
- Callaghan Towers have no emergency plan
- (Comment Chinn): We need better retail, better housing stock to effectively recruit young families
- (Rick and Charlie): Oak Ridge is at a crossroads
- (Homes with on street parking make Oak Ridge a rental community
- (Comment Kerley): Low cost rental properties are killing our ability to bring in new people
- (Comment Chuck): The Advance should have been longer now we have to rush through what council can do
- What is an average city our size's rental unit %
- (Chuck): We have done a great job providing services to low income people
- Need to find a way to market our central part of the city to a more stable economic class

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- 70 year old homes should have character
- Homes from 50's-70's are time bombs

### **The Council Generates Opportunities for Improvement**

- (Ellen): We need to do a better job of selling Oak Ridge
- (Ellen cont'd): Need events/opportunities to success of city marketing
- Q: Can addressing Kudzu provide marketing opportunity
- (Ellen): Get some buzz over historic preservation
- (Ellen): We have lots of negative perceptions to overcome
- Q: Can fiber connection in the home be achieved
- (Charlie): Already have a great example of land bank working well
- (Rick): Need to spend money that increases ROI in terms of young families
- (Rick): Once we get more young families living here, then we can address other things
- Housing Authority is the second most powerful body in Tennessee
- (Ellen): Need to help Housing Authority if we want them to change their mission
- Oak Ridge Housing Authority 166 housing vouchers, and 100 owned units
- (Warren): Financial situation and financial obligations can't be ignored which is why Main Street is so important
- (Warren): Desperate for sales tax revenue, and new productive citizens
- (Warren): We will need additional sessions on this
- (Warren): We have a great city staff, great school system, and great things going on but we are losing in the market place
- (Warren): It has been a tough 6 months but I am looking forward to 2016
- (Warren): Council needs to rank priorities and move ahead
- (Warren): Thanks to the staff for putting this information together. It has been Eye opening to see it presented at 1 time
- (Mark): Council may want to revisit financial restrictions put onto the land bank
- (Kelly): Our Housing Authority can be instrumental in shaping the city through the use of all its "powers"
- (Kathryn): Tax Income Credit ventures now only allowed to improve property
- (Kelly): We have a stagnant (middle to high income) resident growth
- (Chuck): We need the big idea's that change the trends of our current population growth
- (Chuck): How do we use our resources to change that trend
- (Mark): 70% of city employees do not live in Oak Ridge
- (Chuck): We need to get DOE people to want to live in Oak Ridge
- (Ellen): Mortgage Lending and Home improvement loans are too scarce
- (Ellen): Find ways to get money released for home improvements when the houses sell
- Land bank has lots of opportunities through its available tools
- In 2016 comptroller has to report on Land Bank
- (Chuck): City council has the power to change the facts
- Not enough good jobs for residents

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- (Ellen): Need higher wages for service industry workers
- (Chuck): How many homes were sold in last year?
- Issues with housing market and sales are not being addressed as facts dictate
- (Chuck): Potential grant for moving to city and residing for a number of years
- (Mark): Should be able to utilize community reinvestment act dollars
- (Jack): Council interested in rehab of old homes attracting young families etc. From outsiders opinion OR just looks different.
- (Jack): have to be selective about neighborhoods suitable for rehab
- (Kerley): Incentives for employees could work to achieve O.R residency

**The session ended by the Council unanimously agreeing on the following items**

**Prioritize the options for what the Council can improve**

1. Reinforce Land Bank activity and evaluate additional options for its continued success
2. Continue to support the Main Street Project and other retail development within the city
3. Market the City more effectively

**Get Consensus on Ideas for Improvement**

Unanimous approval on three targeted items

**The participants were asked what they would like to do as a result of this session**

**1:55 All Speak/Take-Aways**

- (Rick): I am going to craft elevator speech with Bruce Applegate's numbers he presented to show a real comparison of O.R and other communities.
- (Charlie): Continue to expand the Land Bank's work
- (Chuck): Stakeholder communication and buy in of all 3 goals
- (Chuck): Involve ADFAC and habitat in discussions
- (Kelly): This has created a framework for discussions with Mark and staff
- (Kelly): Make sure each agenda refreshes the progress on the three areas
- (Warren): Will communicate this was a good and productive meeting for moving forward and determining the way
- (Mark): Insert strategic discussions on goals into meetings
- (Ken): Make Sure there is no legal challenge to Land Bank

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**The rest of the agenda was not discussed due to time limitations**

**2:00 PM End of Session**

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the 1990s, the number of people with a mental health problem has increased in the United Kingdom (Mental Health Act 1983).

There is a growing awareness of the need to improve the lives of people with mental health problems. The United Kingdom has a long history of caring for people with mental health problems in institutions. However, in the 1980s and 1990s, there has been a move towards community care, with the aim of providing a more humane and cost-effective way of caring for people with mental health problems.

Community care involves providing services to people with mental health problems in their own homes, rather than in institutions. This can be done in a number of ways, including providing residential care, day care, and home care. Residential care involves providing a place to live for people with mental health problems, while day care involves providing a place to go during the day for people with mental health problems. Home care involves providing services to people with mental health problems in their own homes.

Community care has a number of advantages over institutional care. It is more humane, as it allows people with mental health problems to live in their own homes and communities. It is also more cost-effective, as it is generally cheaper to provide services in the community than in institutions. Finally, community care can help to reduce the stigma associated with mental health problems.

However, community care also has some disadvantages. It can be more difficult to provide services in the community, as there are often fewer resources available. It can also be more difficult to ensure that services are of a high quality. Finally, community care can be more expensive in the long run, as it may require more staff and resources to provide services in the community.

Despite these challenges, community care is becoming an increasingly important part of mental health care. It is essential to ensure that people with mental health problems have access to the services they need to live their lives to the fullest. This requires a commitment to providing high-quality, cost-effective services in the community.

There are a number of ways to improve community care. One way is to increase the number of resources available, such as staff and services. Another way is to improve the quality of services, such as by providing more training for staff and more support for people with mental health problems. Finally, it is important to ensure that people with mental health problems have a say in the services they receive.

Community care is a complex issue, and there are many different ways to approach it. However, it is clear that community care is essential for providing humane and cost-effective care for people with mental health problems. It is essential to ensure that people with mental health problems have access to the services they need to live their lives to the fullest.

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**PUBLIC WORKS DEPARTMENT MEMORANDUM**  
**16-05**

**DATE:** February 10, 2016  
**TO:** Mark S. Watson, City Manager  
**FROM:** Jack L. Suggs, Interim Public Works Director  
**SUBJECT:** POTENTIAL COUNCIL REPRESENTATION IN ENGINEERING FIRM  
EVALUATION

The Public Works Department uses a variety of engineering firms to conduct various tasks as part of its normal operation. In some cases, these tasks are limited and of short duration; such as a one-time structural evaluation or other small project. However, in some areas it is beneficial to develop a long term relationship with an engineering firm. These long term relationships allow the City to benefit from continuity of knowledge, records, and design philosophy. One such long term relationships have been with the firm of LDA Engineering (formerly Lamar Dunn and Associates).

LDA provides guidance to the City, not only in engineering and inspection, but they also aid in obtaining grants, low interest loans, and helping us meet reporting requirements as specified in those loans and grants. They maintain records and engineering models of City systems and have provided ongoing services in a number of projects over an extended period of time.

Over the next several months, staff will be soliciting request for qualifications to engineering firms who have expertise in the areas where we have need. Primarily, I see the needs being the continuation of the wastewater system rehabilitation and maintenance, design services relative to the water plant and distribution system, and aid in examining the need for a stormwater utility.

This solicitation is not due to any shortcoming on the part of our current engineers, but simply reflects the City's desire to re-evaluate our relationships for future work. In fact, staff fully expects the firm of LDA to be a strong contender for a long term relationship into the future in areas of their specific expertise.

Because of the nature and importance of these selections, I believe it would be beneficial to seek input into the process from a member of the City Council or their representative. I envision the representative having input into developing the request for qualifications, selecting firms that will be asked to participate, and then in reviewing submissions and conducting interviews while making selections for firms to use for various areas of expertise. The representative might then report out to the Council body on the process that was followed and their impression of the firms considered.

I am requesting your help in approaching Council to see if they, as a body, are interested in participating in the process with a representative member. I will be present at the upcoming work session to answer any questions that might arise from this request.

  
\_\_\_\_\_  
Jack L. Suggs



CITY OF  
OAK RIDGE



OFFICE OF THE MAYOR

POST OFFICE BOX

OAK RIDGE, TENNESSEE 37831-0001

December 1, 2015

Ms. Susan M. Cange  
Manager - Oak Ridge Office of Environmental Management  
Oak Ridge Operations  
U.S. Department of Energy  
P. O. Box 2001  
Oak Ridge, Tennessee 37831

Dear Ms. Cange:

On behalf of the City of Oak Ridge, I wish to submit the attached statement and inquiry about the Department of Energy Environmental Management proposed Disposal Facility. The attached document has been approved for transmittal by the Oak Ridge City Council action on November 16, 2015.

The City of Oak Ridge recognizes the needs and mission of the local DOE Environmental Management Division associated with dismantling major facilities and disposing of the associated waste. As the affected community, we have provided the attached inquiry for your review and written response to ensure appropriate background response to our citizenry.

If the City can provide any further clarification on these comments, please do not hesitate to contact the City Manager's office.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Warren L. Gooch".

Warren L. Gooch  
Mayor

Attachment

cc: Mark S. Watson, City Manager



**City of Oak Ridge Comments on the U.S. Department of Energy  
Proposed Environmental Management Disposal Facility**  
November 16, 2015

The City of Oak Ridge understands that the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and the Tennessee Department of Environment and Conservation (TDEC) are parties to a Federal Facilities Agreement (FFA), which sets forth schedules and enforceable milestones for the completion of cleanup work on, and related to the DOE's Oak Ridge Reservation (ORR). To meet the current FFA schedule, DOE has determined that a decision to construct a second low-level nuclear waste facility on the ORR in Oak Ridge must be made in early 2016. The proposed second facility is being referred to as the Environmental Management Disposal Facility (EMDF).

For the previous decade, the DOE has concentrated on the elimination of contaminated and dilapidated structures associated with the K-25 Building campus, including K-25 which was one of the largest buildings in the world and required total demolition. Ongoing efforts continue to reclaim this major brownfield site. The existing landfill, the Environmental Management Waste Management Facility (EMWMF) is anticipated to contain the full amount of low level radioactive debris and soil generated from the K-25 site.

To ensure capacity for the waste anticipated from future environmental cleanup, DOE is proposing to establish an additional landfill with capacity for an additional 2.5 million cubic yards of cleanup waste, to be located adjacent to the existing site and on the Oak Ridge Reservation.

The ORR was designated a National Priorities List Superfund site in 1989 pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). While most federal construction projects require a comprehensive analysis pursuant to the National Environmental Policy Act (NEPA), a DOE policy established in 1994 allows NEPA values to be incorporated into CERCLA-related projects in order to streamline analyses and expedite cleanup activities.<sup>1</sup> Thus, the decision making process for the proposed EMDF follows the same CERCLA process as in 1999 when the EMWMF was approved. The nine CERCLA criteria to be evaluated by the FFA parties are:

- Overall protection of human health and the environment;
- Compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume;
- Short-term effectiveness;
- Implementability;
- Cost;

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<sup>1</sup> *Secretarial Policy Statement on the National Environmental Policy Act*. The Secretary of Energy, Washington, DC. June 13, 1994.

- State acceptance; and
- Community acceptance.

As this new site is considered, the City submits the following comments regarding the proposed waste facility in order to provide a community perspective and early input to the FFA parties at this stage in the decision making process. Additional comments will be submitted as the process proceeds and the City of Oak Ridge would reserve the right to do so as further information and data are provided from state and federal agencies reviewing the siting process as parties to the Federal Facilities Agreement (FFA), to which the City of Oak Ridge is not a party.

City officials cannot support construction of a second nuclear waste facility without the FFA parties adequately addressing issues and concerns as described in the comments below. The City requests written responses to the comments in a timely manner in order to allow for review and response prior to DOE's release of its Proposed Plan, currently scheduled for January 15, 2016. The City also requests meetings with senior DOE management to discuss in greater depth these community concerns about the proposed facility.

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1. In July 2014, the City of Oak Ridge contracted with the consultants, The Ferguson Group of Washington D.C., to develop a Community Impact Assessment of the DOE's proposed Environmental Management Disposal Facility (EMDF). The City was particularly concerned with impacts of the proposed landfill on the community. The consulting team gathered community input at several public meetings in Oak Ridge, and solicited information from DOE and contractor officials, TDEC, local government officials, and members of the public. In addition, the consulting team analyzed DOE's technical documents related to the proposed EMDF, as well as the detailed comments submitted to DOE by TDEC and the U.S. Environmental Protection Agency (EPA) about the DOE's proposed landfill plan. The Community Impact Assessment was finalized in September 2015. **The City urges DOE, EPA and TDEC to review the full assessment and requests specific response to the City regarding the recommendations contained within the Ferguson report.**
  2. Local concerns raised in the community assessment about the proposal EMDF include:
    - The site-selection process is confusing. Siting criteria differ from those normally used by DOE and the Nuclear Regulatory Commission (NRC). For instance, the proposed site would not qualify under NRC standards and processes for siting of a low-level radioactive waste facility. The proposed site is 650 yards (about 550 meters) from the DOE boundary and the nearest resident (on a large tract accessed from the unpaved part of Tuskegee Drive) is just 1.3 km away, differing from the 2 km NRC minimum. (Scarboro residential community is 2.1 km away). **Further clarity, response and assurance is requested to address proximity of residents.**
    - The proposed site is physically and geologically complex, and doesn't qualify under TDEC criteria that require separation from groundwater sources. **Detailed summary of these protection measures are requested.**
    - Concerns about long-term integrity of the proposed engineering measures to divert groundwater and surface water. **Please explain.**

- DOE cost estimates for offsite disposal are based on what DOE is currently paying at the Western United States private facilities, but prices might be less if DOE were to dispose of larger amounts of waste with lower levels of radioactivity in eligible regional landfills. **Also, the cost estimates for landfill construction and operation cover only 5 out of the 6 waste cells.**
  - DOE proposes to put mercury waste from Y-12 into this landfill, but RCRA land disposal restrictions don't normally allow mercury to be disposed in RCRA-licensed hazardous waste landfills. **Please clearly identify intent to use or not use the proposed landfill for mercury disposal.**
  - Landfill management, performance and efficiencies related to the existing landfill are essential to the community. DOE must efficiently use the capacity of the existing landfill and a proposed landfill – Instances may have occurred where waste didn't need to be handled as radioactive waste. For instance, clean soil has been used to fill void spaces instead of breaking up the debris for more efficient disposal. **Please identify management practices that will be used as "lessons learned" from management of the existing landfill.**
  - The association with long term nuclear activities and radioactive waste has had challenging economic impacts and public image effects on the community. This potentially impacts current and future property values and continued Oak Ridge economic growth. The proposed site for the EMDF is in the Southwest Quadrant, which is one of the few remaining areas of the city suitable for future development. Quantifying how the proposed landfill may adversely impact the community's competitive ability to attract new residents, including young families, should be addressed. **The City of Oak Ridge suggests that a continuous public information program be provided by the DOE Environmental Management Division or its successor for regional understanding and clarification of landfill impacts and information.**
3. The City of Oak Ridge expresses strong concern for the immediate availability of federal funding for corrections and repairs to future unanticipated hazardous material events. Noting the re-mining costs of similar facilities in Ohio, available funding for a similar effort is not available in the existing maintenance fund. The Federal government is going through a continuous downsizing of domestic agenda items in the federal budget. Major funds must be available for re-mining costs or repairs without impacting the current missions. Private waste sites licensed by the NRC are required to put more money into long-term care funds such as financial assurance bonds than DOE has paid into the perpetual care maintenance trust fund for the existing nuclear waste landfill (presently at \$15M). The existing trust fund was required by, and is managed by the State of Tennessee. It is unclear where funds would come from should a substantial breach or other emergency arise related to the existing landfill that exceeds existing funding levels. There is no mention of additional financial assurance requirements in the existing draft documents. **The City of Oak Ridge strongly suggests that a continued contribution to the perpetual trust account on this project be mandated at a contribution of \$1M per year until the fund reaches an amount of at least \$50M as administered by the current FFA.**
4. **The proposed EMDF provides an enormous benefit to the taxpayers of United States if debris remains perpetually in Oak Ridge, Tennessee.** The documents reviewed to date do not provide a detailed cost/benefit analysis or a

life cycle cost analysis that quantifies the community costs associated with permanent waste disposal. This decision will necessitate a permanent land use restriction and a perpetual commitment to maintenance and oversight of the facility. The City of Oak Ridge receives a Payment in Lieu of Taxes (PILT) at an agricultural value for the financial support of the DOE Reservation. However, our city services must be at a level of response and training that is greater than most small-city capacities when called for service. **As part of the hosting of this site, financial compensation to the community for this EMDF site should be substantially adjusted and increased representing a new value per acre for the City and Anderson County.**

Most private waste disposal sites, for example, provide direct financial benefits to the host communities and such should be provided for the EMDF site. Near-term jobs associated with on-site disposal could be offset by opportunity costs stemming from prospective employers not wanting to invest near a low level nuclear waste landfill. Conversely, there are several existing Oak Ridge companies which could benefit by assisting DOE and its contractors with implementation of alternative waste disposal options, including offsite disposal at other federally owned or commercial sites where the climate is comparatively dry.<sup>2</sup>

5. The Department of Energy has noted consistent change in the federal employees and contractors for the environmental cleanup projects on the DOE Reservation. In the late 1990s, the City was urged to participate in the Partners for Progress program which was to convert the large K-25 brownfield site into active industrial redevelopment. The City of Oak Ridge has made substantial capital utility investment into the area and is still waiting for completion of sufficient cleanup to allow full and active reindustrialization through the transfer of land and replacement of utility infrastructure. A recent Technetium release into the City's sewer system demonstrates the need for completion of the site cleanup project, including underground infrastructure.

The City of Oak Ridge is ready for the K-25 redevelopment area to be completed. With the advent of a new General Aviation airport in the 2018 timeframe, it is time to get the job done, so redevelopment can occur. The City is informed that the existing EMWMF Landfill is for purposes of the K-25 complex. **The City of Oak Ridge strongly suggests that a Memorandum of Understanding be signed between the DOE and the City of Oak Ridge that addresses annual benchmarks and an annual financial commitment in the Environmental Management budget dedicated to the progress toward complete redevelopment of the K-25 site prior to the opening of the proposed EMDF.**

6. The existing landfill and proposed landfill are required to keep records on all material being placed in the landfill. The City of Oak Ridge as a non-party in the FFA group, believes transparency is needed regarding the material permanently committed to lands within the Oak Ridge city limits. Accordingly, DOE should make an annual report to the community on waste disposal in the existing and proposed landfills.

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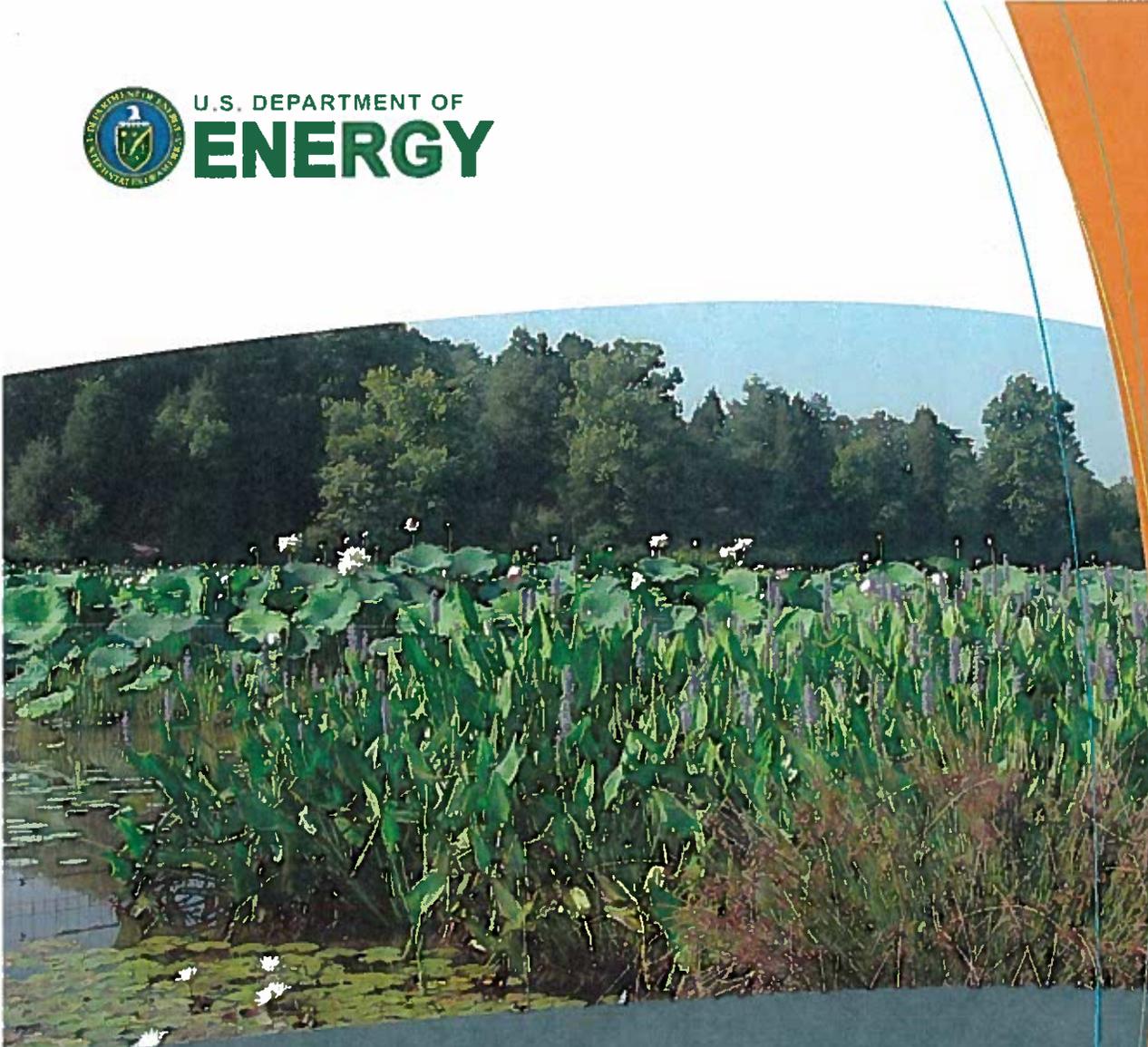
<sup>2</sup> See <https://www.emcbs.doe.gov/SEB/EM%20Nationwide%20DiGP%20%28OP%29/index.php> and <https://www.emcbs.doe.gov/About/PrimeContracts>

The City, in conjunction with many partners, has worked diligently on a path to attract new businesses, develop competitive housing opportunities, and maintain excellent schools and a quality environment for a new generation of residents. But a number of socioeconomic challenges remain. Many of these challenges were identified in a 2003 comprehensive analysis of the community's efforts to achieve financial self-sufficiency pursuant to the Atomic Energy Community Act of 1955. The analysis pointed out a number of factors adversely impacting the City's ability to achieve self-sufficiency. These include: insufficient and aging infrastructure; high local tax rates; extensive federal ownership of land; aging and limited housing stock; a poor environmental image that impeded development; and the fact that most DOE employees lived elsewhere, which still occurs to this day. As a result of this analysis, in 2004, U.S. Senators Bill Frist and Lamar Alexander wrote to the Secretary of Energy, acknowledging that the previous self-sufficiency agreement had not been fully realized. They urged DOE to develop "a viable self-sufficiency plan that may include the transfer of lands identified in the 1985 agreement that have not yet been transferred, the resumption of special assistance payments, or other proposals developed by the Department." The City respectfully requests a response to this letter, as the proposed landfill project has the potential to exacerbate the City's self-sufficiency problems.

In closing, the City of Oak Ridge thanks the Department of Energy for the opportunity to comment on the proposed EMDF landfill. The City of Oak Ridge understands the national, statewide, countywide and local impacts of this important proposal. The City of Oak Ridge supports safe and responsible environmental management on the Oak Ridge Reservation. With proper protections in place and educated public understanding, the needs of the Department of Energy and the adjacent community can be met in a government to government partnership for many years to come.



U.S. DEPARTMENT OF  
**ENERGY**

A photograph of a pond with lily pads and purple flowers, set against a backdrop of a forested hillside under a blue sky. The image is partially obscured by a large orange curved shape on the right side of the page.

## DEPARTMENT OF ENERGY OAK RIDGE OFFICE OF ENVIRONMENTAL MANAGEMENT ECONOMIC IMPACT ANALYSIS

The Oak Ridge Office of Environmental Management was established to remove environmental legacies resulting from more than 60 years of nuclear weapons development and government-sponsored nuclear energy research. Each of Oak Ridge's three primary cleanup sites faces unique challenges that present risk and hinder the Department's missions.



# DEPARTMENT OF ENERGY OAK RIDGE ENVIRONMENTAL MANAGEMENT

The Oak Ridge Office of Environmental Management (OREM) is a U.S. Department of Energy (DOE) field site located in Oak Ridge, Tennessee. The site dates back to 1942 as part of the Manhattan Project. Engineers established three distinct campuses within the Oak Ridge Reservation to develop enrichment technologies for uranium and plutonium. In the decades since, each of these campuses—the Oak Ridge National Laboratory (ORNL), Y-12 National Security Complex (Y-12), and the former K-25 Gaseous Diffusion Plant, now known as the East Tennessee Technology Park (ETTP)—evolved and conducted different missions for the Department.

While Oak Ridge has a rich history, it also has an increasingly bright future. Our employees realize that their progress directly impacts the Department's other missions and development at the site. At Y-12, we are working to remove mercury soil and groundwater contamination, manage excess facilities, and modernize the site to enable the National Nuclear Security Administration to continue its crucial national security and nuclear non-proliferation responsibilities. At ORNL, we are working to remove excess and contaminated facilities to improve safety and make way for the world's most advanced supercomputing, materials, and energy research. At ETTP, we are executing a portfolio of cleanup projects that demolish facilities, dispose legacy waste, and remediate soil and groundwater to return the land to beneficial reuse—a private sector industrial site with a historical national park.

Our office's primary mission is to protect the region's health and environment, enable the Department's vital missions locally, and make clean land available for future use. To accomplish this, we adhere to several principles as we conduct our operations. We value the skills of our employees, operate in a transparent manner, collaborate with our various stakeholders, encourage innovation and continuous improvement, and demonstrate accountability through good stewardship of taxpayers' money.

OREM's daily operations create jobs and income for area residents and generate substantial tax revenues for state and local governments. Overall spending by OREM and its contractors added approximately \$545 million to Tennessee's state gross domestic product in fiscal year 2014, including \$422 million in Anderson, Roane, and Knox Counties.

## OAK RIDGE CLEANUP

In October 1942, the U. S. Army Corps of Engineers began acquiring land for the Manhattan Project. By March 1943, three major industrial facilities were under construction in Oak Ridge. The K-25 (present day ETTP) and Y-12 plants were built to separate uranium, while the X-10 site (present day ORNL) housed the Graphite Reactor, the world's first self-sustaining nuclear reactor. Throughout the next six decades the sites purified isotopes, conducted research, built weapons, and created environmental legacies that the OREM program is now cleaning and removing.

Since 1989, when OREM was formed, the DOE has made great progress remediating contaminated soil and water and demolishing radioactively contaminated facilities. To dispose of wastes generated by environmental restoration activities, including the demolition of the massive process buildings at ETTP, DOE built the Environmental Management Waste Management Facility (EMWMF). The disposal facility has been engineered to safely contain the low-level hazardous wastes from cleanup activities.

After completing the removal of the environmental legacies at the former K-25 site in the next 5-7 years, DOE will continue with cleanup at Y-12 and ORNL. Because DOE's existing waste disposal facility is nearing capacity, another disposal option is needed for waste from Y-12 and ORNL. The ability of both Y-12 and ORNL to deliver and grow their respective missions, and modernize their sites, is directly related to the cleanup and removal of contaminated facilities.

An additional onsite waste disposal facility has been proposed to provide the safest, most timely and cost-effective cleanup strategy.

Demolition is complete for K-33, K-31, K-29, and K-25 (circled in blue); demolition is underway at K-27 (circled in orange).



Debris from demolition at ETTP is disposed on site at the EMWMF.



## CURRENT ONSITE WASTE DISPOSAL

The OREM program has extensive experience safely constructing and operating landfills. The current waste disposal facility has operated since 2002 without a safety incident.

The current onsite facility's design includes a 14-foot multi-layered closure cap system. The 15-foot underlying containment system includes a 5-foot multi-layered liner above a 10-foot geologic buffer. Groundwater monitoring is conducted regularly, in accordance with regulatory requirements.

Managing waste on site with ongoing regulatory oversight has demonstrated operation efficiencies and risk reduction. Onsite disposal has eliminated the need to transport waste millions of miles on public roads to offsite disposal facilities. These offsite facilities are outside of the OREM operational footprint and governed by other states, posing risk to the reliable disposal of waste.

Current onsite disposal facility and cross-section of engineered disposal cell



## ECONOMIC BENEFITS OF OREM PROGRAMS

OREM's presence in Tennessee generates substantial economic benefits. Everyday operations create jobs and income for residents and increase state and local tax revenues. A previous study, conducted by the East Tennessee Economic Council for fiscal year (FY) 2013 by the Howard H. Baker Jr. Center for Public Policy at the University of Tennessee, Knoxville, provided estimates of the economic benefits of DOE on the state of Tennessee. A new study, also by the Howard Baker Center, was conducted to specifically assess both the economic impacts of FY14 OREM programs and a potential new onsite disposal facility. Part I of the study summarizes the key economic benefits conveyed in Tennessee, and more specifically in Anderson, Roane, and Knox Counties, using data from FY14. Part II summarizes the economic impacts that a second onsite disposal facility would provide to the state and local economies. Results from both parts confirm that there are substantial environmental and economic benefits of OREM's current and planned activities on the state as well as on its residents.



Final demolition of the K-31 building at ETPP (above) creates site for industrial reuse.

### Total FY14 Economic Impact of OREM-Related Programs

	Anderson/Roane/ Knox Counties	Tennessee
Output/State GDP	\$422.3 M	\$545.3 M
Personal Income	\$277.9 M	\$316.6 M
Sales Tax Revenue	\$14.9 M	\$16.9 M
Employment	4,800	6,200

Employees (below) worked on a project to remove irradiated parts from a reactor pool at ORNL.



### PART I

### KEY FINDINGS FOR OREM FY14 ACTIVITIES:

- Overall spending by OREM and its contractors added approximately \$545 million to Tennessee's gross domestic product (GDP) in FY14, including more than \$422 million in Anderson, Roane, and Knox Counties.
- Approximately 6,200 full-time jobs were created in Tennessee by OREM in FY14, including both direct and indirect employment, of which 4,800 were in Anderson, Roane, and Knox Counties.
- OREM-related activities generated roughly \$317 million in total personal income in Tennessee in FY14, of which \$278 million were in the three-county region.
- Spending by OREM and its contractors generated approximately \$17 million in state and local sales tax revenue in Tennessee in FY14. Of this total, nearly \$15 million in tax revenues were generated in the three-county region.
- Direct regional economic impacts include approximately \$511,000 donated by OREM contractors and their employees to various local charities in FY14.

## DOE-OREM SPENDING GENERATED JOBS, PAYROLL AND TAX REVENUES

Direct spending by OREM produces state and local benefits through jobs, income, and sales tax sending ripples through the economy. Multiplier effects\* are created as the income generated by the direct and indirect effects is spent and re-spent within the local economy.

### JOBS:

The estimated 6,200 jobs created in Tennessee through OREM-related spending resulted from 1,900 full-time jobs directly provided by OREM and its major contractors within Anderson, Roane, and Knox Counties in FY14.

Every direct job created by OREM supported an additional 3.2 jobs in Tennessee.

### PAYROLL:

OREM-related direct jobs represented a payroll of more than \$146 million in FY14, with an average salary of \$75,500, which is 66% above the average salary in Tennessee.

An additional \$23 million were spent on pension disbursements, bringing the total direct income paid in FY14 to \$168 million to current and former employees.

For every dollar spent on salaries and pensions, approximately \$1.88 was generated in additional state income. Income benefits from OREM-related activities were estimated at more than \$316 million in Tennessee and nearly \$278 million in the three-county region.

### TAX REVENUES:

Direct spending for goods and services by OREM and its contractors totaled \$127 million in FY14.

OREM-related spending in the three-county region produced more than \$9 million in direct sales tax revenues. As a result, nearly \$17 million were collected in sales taxes in Tennessee, originating from OREM-related expenditures.

OREM programs direct spending in FY14 totaled more than \$295 million.



A 1-megawatt solar field and spec building at FTTP are examples of site reuse.

*\*Note on multiplier effect: Translating direct effects into total effects through multiplier analysis requires the use of Regional Input-Output Modeling System (RIMS II) multipliers. The RIMS II multipliers used in this analysis are specific to Tennessee and are calculated by the Bureau of Economic Analysis.*

# EXPECTED ECONOMIC IMPACT OF A NEW DISPOSAL FACILITY

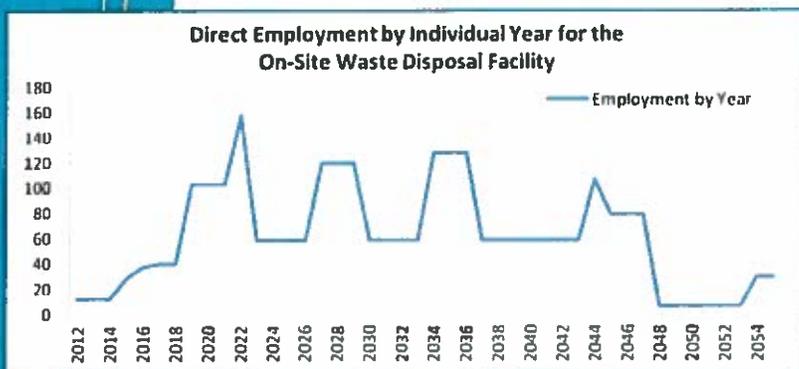
OREM is currently designing a second onsite disposal facility that would enable the safe, timely, and cost-effective cleanup of the Oak Ridge Reservation. This section examines the economic impact of this proposed new facility from the beginning of design in 2012 through facility closure in 2047 and monitoring and maintenance from 2048-2055, after which long-term care would begin.

## Part II

### KEY FINDINGS FOR A SECOND ONSITE DISPOSAL FACILITY INCLUDING DIRECT, INDIRECT AND MULTIPLIER EFFECTS:

- Spending by OREM and its contractors would add approximately \$1.3 billion to Tennessee's state GDP over the life of the project. Approximately \$1 billion of which is projected to accrue to Anderson, Roane, and Knox counties.
- OREM-related activities for the project would generate roughly \$695 million in total personal income in Tennessee; of which \$609 million would go to the three-county region.
- Cumulative annual employment (job years) over the life of the project is estimated to reach 6,800. Approximately 5,700 of those job years are projected to be filled in Anderson, Roane, and Knox counties.
- Spending by OREM and its contractors would generate approximately \$54 million in sales tax revenue in Tennessee. Of that total, an estimated \$50 million in tax revenues are projected for the three-county region.

### DIRECT BENEFITS OF A SECOND ONSITE DISPOSAL FACILITY



Direct employment for the on-site waste disposal facility would result in an estimated 2,700 job years, a figure based on cumulative employment by year over the life of the project. The number of workers at the facility would vary considerably year-by-year with peaks at each construction phase and during closure.

With a second onsite disposal facility, OREM and its contractors would employ highly-skilled managers, engineers, operators, laborers, foremen, and security professionals.

The study estimates more than \$723 million would be spent by the environmental cleanup program during the life-cycle of the proposed on-site disposal facility. The potential economic impacts associated with these expenditures are substantial.

OREM's purchase of goods and services from Tennessee businesses to design, construct and operate the second on-site disposal cell would contribute significantly to the sales tax base. OREM and its contractors would directly pay an estimated \$18 million in sales tax over the life of the project.

Current waste disposal facility (aerial view during operations) is projected to reach maximum capacity in 2023 at current funding levels.

## ADDITIONAL ECONOMIC BENEFITS FROM A SECOND ONSITE DISPOSAL FACILITY

When circulated through the state economy, spending by OREM for a second onsite disposal facility would generate personal income benefits for residents, and sales tax revenue for state and local governments in Tennessee.

Direct spending over the life of the project is projected to increase Tennessee's GDP by nearly \$1.3 billion as a result of indirect and multiplier effects.

- This increase in State GDP represents expected benefits of payroll and non-payroll expenditures by OREM.

Economic Benefits of a Second On-Site Waste Disposal Facility		
Impact	Direct	Total
Output/State GDP	\$723.3 M	\$1.3 B
Personal Income	\$351.1 M	\$694.7 M
Sales Tax Revenue	\$18.2 M	\$54.1 M
Cum. Annual Employment	2,700	6,800

Total personal income benefits from OREM activities in Tennessee, related to a second onsite disposal cell, is projected to total almost \$695 million.

- Every dollar of income paid directly to workers of OREM and its contractors is expected to create \$1.96 in total income for Tennessee residents.

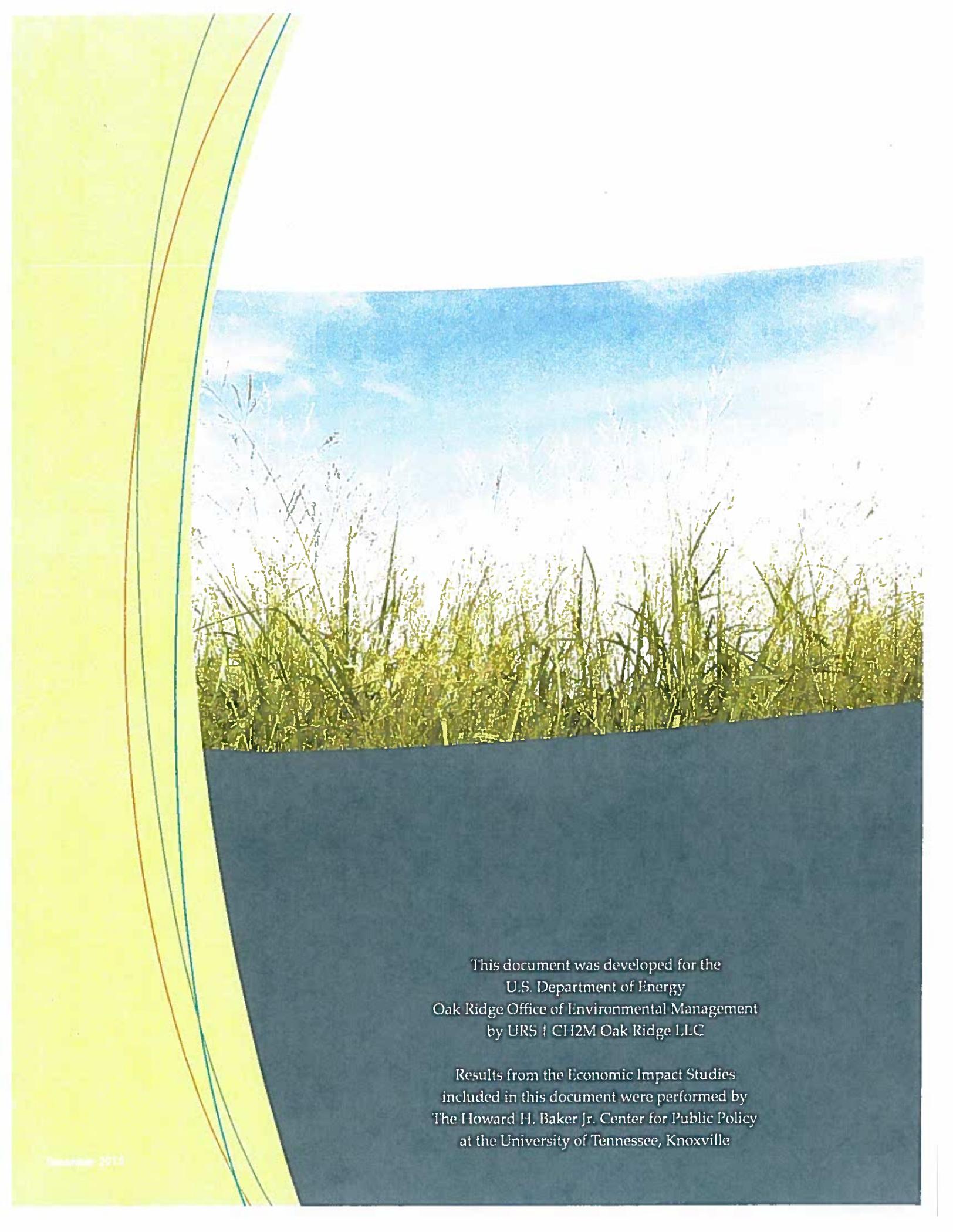
Overall direct employment related to the project (2,700) would result in approximately 6,800 full-time job years.

- For every direct job provided by OREM, 2.5 jobs would be supported across the Tennessee economy.

Total sales taxes associated with OREM programs, related to a second onsite disposal facility, would total roughly \$54 million.



Proposed location of additional disposal facility adjacent to current disposal facility



This document was developed for the  
U.S. Department of Energy  
Oak Ridge Office of Environmental Management  
by URS | CH2M Oak Ridge LLC

Results from the Economic Impact Studies  
included in this document were performed by  
The Howard H. Baker Jr. Center for Public Policy  
at the University of Tennessee, Knoxville