RICHLAND COUNTY

Finance & Personnel Committee

July 2, 2021

NOTICE OF MEETING

Please be advised that the Richland County Finance and Personnel Committee will convene at 1:00 p.m., Tuesday, July 6th, 2021 in the County Board Room at 181 W. Seminary Street and via videoconference and teleconference using the following information:

WebEx Videoconference:

https://richlandcounty.my.webex.com/richlandcounty.my/j.php?MTID=m21ab4f1b0ce831cf8d9ff1c315a baf87

Meeting number: 182 843 4153, Password: richland

WebEx Teleconference: WebEx teleconference phone number: 408-418-9388, Access code: 1828434153##

If you have any trouble accessing the meeting, please contact MIS Director Barbara Scott at 608-649-5922 (phone) or <u>barbara.scott@co.richland.wi.us</u> (email), or Finance & Personnel Committee Chair Shaun Murphy-Lopez at 608-462-3715 (phone/text) or <u>shaun.murphy@co.richland.wi.us</u> (email).

Agenda:

- 1. Call to order
- 2. Proof of notification
- 3. Agenda approval
- 4. Previous meeting minutes*

Committee Member Requests & Other Referrals

5. Ambulance purchase of REC building using fund #75*

<u>Budget</u>

6. Budget guidance*

Finance (including purchasing and contracts)

- 7. Radio tower analysis contract*
- 8. Ambulance fund transfer*

Personnel

- 9. Employee meals per diem rate*
- 10. Pine Valley sign-on bonus*
- 11. Vacation accrual discrepancy handbook v. Resolution 19-36*
- 12. Classification, compensation, and staff authorization policy*
- 13. Future agenda items
- 14. Adjournment

RICHLAND COUNTY

Finance & Personnel Committee

*Meeting materials for items marked with an asterisk may be found at <u>https://www.co.richland.wi.us/financePersonnelMinutes.shtml</u>.

CC: Committee Members, County Board, Department Heads, Richland Observer, WRCO, Valley Sentinel, Courthouse Bulletin Board

FINANCE AND PERSONNEL COMMITTEE

June 18, 2021

The Richland County Finance and Personnel Committee convened at 1:00 p.m., Friday, June 18st, 2021, in the County Board Room at 181 W. Seminary Street and via videoconference and teleconference.

Committee members present included County Board Supervisors Shaun Murphy-Lopez, Marty Brewer (arrived late), Marc Couey, Linda Gentes, Melissa Luck, Don Seep, and David Turk (left at 3pm).

- 1. Call to Order: Committee Chair Shaun Murphy-Lopez called the meeting to order.
- Proof of Notification: The Committee Chair Shaun Murphy-Lopez verified that the meeting had been properly noticed. Copies of the agenda were sent by email to all Committee members, WRCO and County department heads, a copy was posted on the Courthouse Bulletin Board and a copy was emailed to The Richland Observer and the Valley Sentinel.
- **3.** Agenda Approval: Motion by Gentes, second by Luck for approval of the Agenda. All Ayes. Motion carried.
- **4. Previous Meeting Minutes:** Motion by Couey, second by Seep approval of the minutes for the June 1, 2021 meeting of the Finance and Personnel Committee. All Ayes. Motion carried.
- 5. Tourism Director Funding*: Mr. Richards was not present and will present information at another time.
- 6. Discontinuing Hidden Valleys membership *: Motion by Seep, second by Brewer to recommend resolution to the Richland County Board to discontinue membership with Hidden Valleys of Southwest Wisconsin. Discussion was had regarding value of Hidden Valleys. No vote on motion. Motion by Seep, no second to refer this back to the Parks Commission. Motion by Luck, second by Murphy-Lopez to amend original motion and to add the verbiage to Direct the Parks Commission to reallocate Hidden Valley money to other forms of tourism advertising for the County. Roll Call vote, 6 Nay, 1 Aye. Motion failed. Motion by Luck, second by Gentes to postpone until the relevant parties can discuss. All Ayes, motion carried.
- 7. Reduction in Highway Clerk position, Creation of Administrative Assistant position*: Motion by Luck, second by Seep to reduce the position of Clerk in the Highway Department from 35 hrs/wk to 20 hrs/wk and create the position of Administrative Assistant for the County Administrator for 20 hrs/wk. Discussion had pertaining to need of Administrative Assistant and the timing of reduction in hours for the Highway Clerk position. Motion by Luck, second by Seep to amend original motion to make the County Administrator Administrative Assistant position a 40 hour per week position and effective as soon as possible and to strike all language regarding Highway Clerk Position. All Ayes, motion. Amended motion to read, motion by Luck, second by Seep to create the position of Administrative Assistant for the County Administrator for 40 hrs/wk and to add the position as soon as possible. All Ayes, Motion carried. Motion by Gentes, second by Luck to keep Highway Clerk Position at the same pay grade and to reduce the hours

to 20 hrs/wk effective Jan 1, 2022 and use the savings to help fund the Administrative Assistant position. Roll Call Vote 4 Ayes and 3 Nays, motion carried.

- 8. Borrowing and taxing for 2022*: Motion by Murphy-Lopez, second by Turk to draft 2022 guidance on an estimated \$1,050,000 in short-term borrowing for capital improvements and capital projects. 6 Ayes and 1 Nay, motion carried. Motion by Murphy-Lopez, no second that Pine Valley Community Village revenues not be used for the County's Operational budget. No motion. Motion by Murphy-Lopez, second by Luck that the Finance & Personnel committee intends to keep property taxes at a roughly zero increase for 2022 over 2021(operational & debt levy). Motion by Murphy-Lopez, second by Luck to withdrawal previous motion. All Ayes, motion carried.
- **9. Departmental guidance packet for 2022 operational budget*:** Discussion about 2022 Budget Objectives & Guidance. No Action taken.
- **10.** Classification, compensation, and staff authorization policy*: Motion by Couey, second by Luck to recommend resolution to the county board to adopt the drafted classification, compensation, and authorization plan. All Ayes, motion carried.
- **11. Contract with Abt Swayne Law Office*:** Motion by Brewer, second by Seep to recommend resolution to the Richland County Board to enter into a contract with Abt Swayne Law, LLC to provide corporation counsel services to Richland County. All Ayes, motion carried.
- **12. Ambulance addendum amendment***: Motion by Luck, second by Couey to move the updates of the Ambulance Service handbook addendum to the County Board. All Ayes. Motion carried.
- **13. Resignation of fairgrounds employee*:** Motion by Brewer, second by Luck to accept resignation of Fairgrounds, Groundskeeper, Warren Keys. All Ayes. Motion carried.
- **14. Future agenda items:** Meal Reimbursement rates, Have Pine Valley discuss funding for 2022 budget, Ambulance Garage, Broadband
- **15. Adjournment:** Motion by Couey second by Luck, to adjourn until July 6th at 1:00pm in the County Boardroom.

Josh Bell Richland County — Accounting Supervisor

FINANCE AND PERSONNEL COMMITTEE June 15th, 2021

The Richland County Finance and Personnel Committee convened at 1:30 p.m., Wednesday, June 15th, 2021, in the County Board Room at 181 W. Seminary Street.

Committee members present included County Board Supervisors Shaun Murphy-Lopez, Marty Brewer, Linda Gentes, Melissa Luck, Don Seep, David Turk, and Marc Couey(absent).

1. Call to Order: Committee Chair Shaun Murphy-Lopez called the meeting to order.

2. Proof of Notification: The Committee Chair Shaun Murphy-Lopez verified that the meeting had been properly noticed. Copies of the agenda were sent by email to all Committee members, WRCO and County department heads, a copy was posted on the Courthouse Bulletin Board and a copy was emailed to The Richland Observer and the Valley Sentinel.

3. Agenda Approval: Motion by Luck, second by Brewer to approve the Agenda. All Ayes. Motion carried.

4. Motion by Turk, second by Gentes to enter **Closed Session Pursuant to Wisconsin State Statue 19.85:(e) Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session** — **Union negotiations.** All Ayes. Motion Carried.

5. Return to open session: Motion by Gentes, seconded by Turk to reconvene in open session. All Ayes. Motion Carried.

6. Possible action on items discussed in closed session: No action taken.

7. Adjournment: Motion by Gentes, seconded by Turk to adjourn to June 18th 2021 at 1:00pm. All Ayes. Motion Carried.

Clinton Langreck Richland County — County Administrator

Agenda Item Cover

Department	Ambulance	Presented By:	Darin Gudgeon			
Date of Meeting:	6 July 2021	Action Needed:	Vote			
Disclosure:	Open Session	Authority:	Committee Structure (D)			
Date submitted:	2 July 2021	Referred by:	Joint Ambulance Committee			

Agenda Item Name: REC Building purchase – fund 75

Recommendation and/or action language:

Motion to ...1) allow use of fund #75 in the purchase of the REC building and renovation for an ambulance garage and emergency management center,

2) recommend resolution of the REC building to County Board for their June 2021 meeting.

Background: (preferred one page or less with focus on options and decision points)

History of Project (Needs):

Joint Ambulance began investigation of future facilities in 2018, in response to identified needs: decontamination, sleeping quarters, shower facilities, laundry facilities, limitations and safety on garage bay for rigs, kitchen facilities, storage, and sanitation concerns with jail plumbing, etc. Our current facility lacks all of the above and has impacted our ability hire and retain staff. Our full-time and part-time staff stay here at the station when on duty, and at times there are multiple crews spending the night. The facility is less than accommodating as we only have one bedroom causing us to utilize cots and blowup mattresses in the radio and records room. The lack of shower and kitchen facilities is also a detriment as staff have nowhere to properly clean themselves after a call or prepare hot meals on shifts.

A subcommittee was assembled to engage in strategic planning for the Ambulance and evaluate local external options to relocate ambulance services. The intensions of finding a new ambulance garage made its way to the County Baord and the borrowing of 2.9million dollars included \$600,000 of appropriations towards an "Ambulance Garage." The committee reviewed several locations and contracted with Jewell's and Associates to evaluate the two most feasible options. The Richland Electric Coop (REC) Building and the Vetesnik building were assessed through funds of the appropriated \$600,000. Both buildings were assessed at over \$900,000 to acquire and renovate for ambulance purposes.

A local philanthropist approached the Joint Ambulance Committee with intentions of building an ambulance garage shell in the summer of 2020. Options of placement on Orange St and in the Industrial Park were investigated. Jewell's and Associates were contracted to begin engineering designs and the Committee engaged with the City and County in the land lease agreement. During the engineering phase, costs of materials quickly began to rise. Discussions on wood vs. steel led to a further evaluation of materials to both build the structure and outfit the interior. The tentative response was to continue with site prep, soil boring, and engineering plans in the anticipation of leveling the site to settle a year and begin construction the following year.

Agenda Item Cover

Discussions were had with members of the county board, the philanthropist and owner of REC building. The Coop proposed that they could reduce the price of the building from the initial \$550,000 down to \$350,000 (company liability costs) and our philanthropist has proposed paying \$200,000 towards the purchase of the building. Leaving the county with \$150,000 to acquire the facility.

Financial Forecasts (Acquisition and Renovation):

Current Financial Projects (in working with Jewell) for acquisition and renovation are as follows:

Richland County An						
		R	EC			
Purchase Price	8,450	area	\$	350,000		
Donation			\$	200,000		
Net Purchase Cost			\$	150,000		
Site CSM			n	ot applicable		
Electrical Generator				included		
	Area	Cost				
	(sf)	(\$/sf)				
Demolition	2,000	10	\$	20,000		
Remodeling (Office/Bedrooms)	1,000	25	\$	25,000		
Remodeling (Basement)	1,280	5	s	6 400		
Lighting upgrades, replace shelving	1,200		Ť	0,100		
Remodeling (Report Writing/Lockers)	765	7.5	Ś	5.738		
Lighting upgrades, minor remodeling		_	Ľ	-,		
Addition (Garage)	710	160	Ş	113,600		
HVAC			Ş	94,250	This number is projected less	
Plumbing (shower)		LS	Ş	10,000		
Electrical	0.450		Ş	31,500		
Communications	8,450	2	\$	16,900		
Sprinkler System			\$	48,756		
water Service		2 500	> c	25,000		
Furnishings (Bedrooms)	6	2,500	> c	15,000		
Furnishings (Offices)	6	2,000		12,000		
Subtotal		150/	> c	574,144		
		15%	> c	63,022		
Iotai			Ş	637,765		

Agenda Item Cover

Awaiting the report on roof inspection. Initial inspection identified solid structure but aged and weathered membrane. The warranty on the roof expires in 2022. The inspector estimated that the roof would function 2-4 years with ensuring drains are open and frequently checking identified weak areas. Resurfacing would be needed in 2-4 years and are seen as an operational expense, of which the ambulance services would begin allocating from operations for the capital improvement.

The current expenditures against Fund #75 apportionment of \$600,000 are as follows:

	Ambulance	
Return to Summary Tab	pital Improv	
	Total	Notes:
Jewell & Assoc Inv #11692	5,150.00	Site plans etc.
Jewell & Assoc Inv #11750	4,860.00	Site plans etc.
Jewell & Assoc Inv #11814	2,102.00	Site plans etc.
Jewell & Assoc Inv #11924	6,884.88	Site plans etc.
BoardmanClark Inv #227814	140.00	Attorney services
BoardmanClark Inv #229003	700.00	Attorney services
BoardmanClark Inv #230061	360.00	Attorney services
BoardmanClark Inv #2234529	3,564.50	Attorney services
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Total	23,761.38	
	600,000.00	
	23,761.38	
	576,238.62	

This leave \$61,526.38 to be covered by ambulance operations or other funding source.

Financial Forecasts (Operations)

In the process of moving into a new facility. The following additional expenditures have been identified:

Actual Utility Expense February 2020 - January 2021

Agenda Item Cover

City Utilities: electric, water, sewer, street lights and fire protection = \$12,127.00

Adjustment for the anticipated costs for sewer, street lights, water and fire protection $\$68.25 \times 12 = \$819 + \$2792 = \$3,611$ (our projected annual cost of the above utilities

WE Energies: Natural gas = \$1273 Adjustment for additional use due to waste heat recovery that will be unavailable: $$1273 \times 1.10 = $1,400$ (our projection with added heat costs)

Total Utilities: \$5,011 Consideration for current EMS utility Expenses in 2021 Budget: Lights \$2045 Heat \$550

Total \$2595

Total Increase to Utilities = **\$2,416**

Maintenance, custodial and ground keeping will be incorporated into full-time staff. = \$0

Snow removal will likely require a contract or agreement with city. = \$?

Administrative Costs. None foreseen = \$0

Building outlay expenses for capital improvements= \$15,000 annually.

***Revenues** — We currently have trouble staffing a second crew because of inability to properly house the members at the station, and reluctance of staff members to want to be on hours when the station is full. We are obligated to have the primary crew available for emergency response. By having a second crew reliably available we hope to provide much needed inter-facility transports. The estimated revenue flow is projected at \$980.00 per transfer (minimum Medicare Amount / estimated 200 additional transfers per year from Richland Hospital) = \$196.000 annually.

Legal Concerns:

The following legal concerns need to be resolved prior to acquisition and renovation:

- 1. Working with corporation counsel in incorporating philanthropist donation in the offer to purchase.
- 2. Working with corporation counsel on title work.
- 3. Working with city to confirm easement and setbacks regarding bay expansion.

Agenda Item Cover

Outstanding items remaining:

- 1. Awaiting the finalized roof report
- 2. Awaiting the final budget adjustment regarding HVAC system.

Petition:

The Joint Ambulance Committee (JAC) has been actively working towards securing a new facility for EMS operations and Emergency Management office space and at their May 19th meeting the committee unanimously approved a motion that the purchase of the REC building be sent to the Finance and Personnel Committee for their consideration and recommending resolution to the County Board. The committee and department feel that this item should be addressed in a timely manner as there are concerns of the building owner's and philanthropist's continued interest in the project if delays continue.

Continued Discussion Point:

There remains public concern of the County investing into a capital project for an ambulance service that currently does not service all municipalities.

Attachments and References:

Building Appraisal	Engineering Layout
Resolution Draft	

Financial Review:

(please check one)

Х	In adopted budget	Fund Number	#75 and #510perations
	Apportionment needed	Requested Fund Number	
	Other funding Source		
	No financial impact		

\$637,765 plus annual increase in operations of an estimated \$17,500. Potential for increased \$196,000 in annual revenues with consideration to wages.

(summary of current and future impacts)						
Review:						
Administrator, or Elected Office (if applicable)						

RESOLUTION NO.21-

A Resolution Authorizing The Purchase of the Richland Electric Cooperative Building.

WHEREAS the Joint Ambulance Committee is actively working towards securing a new facility for the Emergency Medical Services operations and office space for the Emergency Management Department, and

WHEREAS, the County Board authorized a borrowing of \$600,000 for the design and acquisition of an emergency services facility; and

WHEREAS Rule 14 of the Rules of the Board requires County Board approval for any expenditure in excess of \$5,000 and the Finance and Personnel Committee has carefully reviewed this proposal and is now presenting this Resolution to the County Board for its consideration.

NOW THEREFORE BE IT RESOLVED by the Richland County Board of Supervisors that approval is hereby granted for the expenditure of up to \$600,000 less any funds from this borrowing heretofore expended on this project, for the acquisition of the Richland Electric Cooperative Building and any improvements needed to remodel the building for the intended uses.

BE IT FURTHER RESOLVED that this authorization is contingent upon the receipt of a \$200,000 donation from Robert Simpson for the specific purpose of purchasing the Richland Electric Cooperative Building, with the total purchase price not to exceed \$350,000.

BE IT FURTHER RESOLVED that invoices for the purchase and remodeling expenses up to \$576,238.62, which is the remaining balance and shall be paid from Fund 75, and

BE IT FURTHER RESOLVED that any invoices for the acquisition and or remodeling cost in excess of the remaining amount of the \$600,000 borrowing shall be paid out of the Joint Ambulance Committee Fund 51 or other funding sources.

BE IT FURTHER RESOLVED that this Resolution shall be effective immediately upon its passage and publication.

VOTE FOR FOREGOING RESOLUTION

RESOLUTION OFFERED BY THE FINANCE AND PERSONNEL COMMITTEE:

AYES_____ NOES_____

FOR AGAINST

RESOLUTION

COUNTY

DATED

___ ___

_ __

_ __

_ _

_ __



Richland Co-Op Electric Association

1027 N. Jefferson Street, Richland Center, Wisconsin 53581

\$550,000 (in total) Land, as-if vacant : \$42,000 Equipment (generator): \$10,000 Improvements: \$498,000

Samuel J. Tesar, Jr. – Wisconsin Certified General Appraiser #466-010 Effective Date of Appraisal: Janaury 28, 2020

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INTENDED USE OF APPRAISAL/INTENDED USER(s):

The purpose of the appraisal is to formulate an opinion of Market Value of the property being described herein, as of January 28, 2020, for purposes of assisting Richland County Emergency Services with placing an offer to purchase on said property. The appraisal was requested by Darin Gudgeon, Director, Richland County Emergency Services. The Intended User(s) are that of Director Gudgeon and the Richland County Emergency Services/Richland County Board.

DEFINITION OF MARKET VALUE (Title XI of the FIRREA):

Market Value means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

Buyer and seller are typically motivated;

• Both parties are well informed or well advised and acting in what they consider their own best interests;

A reasonable time is allowed for exposure in the open market;

• Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and

• The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

RIGHTS APPRAISED:

The real property rights appraised herein are Fee Simple Estate.

The Fee Simple Estate is defined from <u>The Dictionary of Real Estate</u> <u>Appraisal</u>, <u>Third Edition</u>, of the Appraisal Institute as:

"Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

TYPE OF PROPERTY:

Subject property consists of an existing office complex on the north side in the City of Richland Center, Richland County, Wisconsin.

LOCATION:

Subject property is located north of the downtown section of this community lying south and east of Highway 14 and west of Highway 80. This is primarily a residential area with some municipal-owned properties and some highway commercial.

Richland Center is the county seat for Richland County and has a population of approximately 5,000 residents. It is home to the University of Wisconsin-Platteville Richland campus, which is a freshman-sophomore campus in the UW system. There is a school district as well (Richland School District) which services the area.

Madison, the state capitol, is located approximately 60 miles southeast of the city and is the nearest metro area. Another metro area, La Crosse, is located approximately 65 miles northwest of the city. Both Hwy 14 and 80 in the city handle about 5,500 to 5,800 vehicles per day, according to DOT counts.

OWNER OF RECORD:

Richland Co-op Electric Association is the owner of record, according to Richland County Register of Deeds and City of Richland Center Clerk.

SALES HISTORY OF SUBJECT PROPERTY:

Subject property has not been sold within the past several years, in fact, has been owned by the co-op since the 1950's. The property, along with an adjacent parcel, is being offered to Richland County Emergency for a reported \$600,000, according to Darin Gudgeon. The adjacent parcel will have the single-family residence razed (by the Co-op) and site will be filled and graded, leaving a level site prior to purchase. Appraiser has not viewed any Offer to Purchase as none was provided.

LEGAL DESCRIPTION:

Schoolcraft Addition (City of Richland Center, Richland County, WI), Lots 7 & 8; Block 44

SCOPE OF THE INVESTIGATION:

The scope of the investigation included a physical inspection of the subject property (January 28, 2020 with Mr. Shannon Clark, Executive Director of Richland Electric Co-op) to ascertain location and physical characteristics. Both the interior and exterior of the building, except the roofing, was completed during the time. Further, Appraiser viewed from the exterior the extra parcel (1044 N. Main Street) which consisted of a 44' x 132' adjacent lot with single family residence. Exterior inspections were made of the comparables used in this report. Sales were researched around the area which was expanded into Crawford, Grant, Vernon, Richland, Iowa, Monroe, and La Crosse counties in Wisconsin. Sales were verified through either local assessor, Register of Deeds, Wisconsin Department of Revenue, real estate broker, area appraiser, or buyer/seller. The Direct Sales Comparison Approach was developed as adequate sales existed. The Income Approach was not developed as subject has mixed use (offices and garage space) and finding suitable rental comparables in this small city was not possible. The Cost Approach was not developed as it would have been relied upon much less due to depreciation which tends to distort the final estimate. The Direct Sales Comparison Approach was used to value the site, as if vacant, as well. An appraisal was not conducted on the Personal Property/Business Equipment. The only such equipment included in the sale is that of the diesel generator, therefore, a Contributory Value assigned. The report is presented in a Summary Appraisal format.

ASSESSED VALUATION/TAXES (Real Property):

The co-op complex is tax-exempt, thus no assessment or resulting tax.

The second parcel (1044 N. Main Street) currently has a residence on a substandard lot (44' x 132') having an Assessed Value of \$43,000 (\$9,000 site + \$34,000 improvements) which translates into \$1,001.33 in real estate taxes for the 2019 tax year.

ZONING:

Subject property is zoned R-1: Single Family Residential District.

Subject's use as an office complex precedes zoning in the community and therefore, is a legal, non-conforming use in the R-1 district. Typically, professional office complex is a permitted use in the "R-O" (Residential-Office) District.

Subject is included in Zone X500, according to FEMA Map #55103C0307D, dated 12/08/2016.

Census Tract: 9703

Note: Both parcels are zoned R-1. The second parcel with the home is to be razed prior to purchase. According to Mr. McCorkle (Zoning Department, City of Richland Center), this soon to be vacant lot could be improved into a parking lot to support the larger parcel.

HIGHEST AND BEST USE:

According to <u>The Dictionary of Real Estate Appraisal</u>, <u>Third Edition</u>, the highest and best use is defined as follows:

The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value.

Subject property use as an office complex/garage is a legal, non-conforming use, as outlined by the R-1 District, since it was in place prior to zoning for the community. The improvements can be rebuilt and use continued, if destroyed, on the existing footprint, according to Bill McCorkle with the Richland Center Zoning Department.

Subject property has been an office/garage since construction, was allowed an expansion for further office space approximately 20 years ago, is allowed by the municipality to continue as said use in the event of destruction, and there is a demand for such type of use in the community. The extra parcel was used mostly as a rental and a place to push snow. I believe four tests are met (physically possible, appropriately supported, financially feasible, and that results in the highest value), therefore, the Highest & Best Use, is that of its current use, Office Space/Garage.

LAND DESCRIPTION:

This mostly level site (parcel #276-1644-7000) measures 132' along N. Jefferson Street and 132' along 7th Street. It is improved with typical city amenities including city water/sanitation, natural gas, curb/gutter, etc.

There is a large concrete parking area on the south side of the complex, having approximately 3,258 sq. ft. of concrete pad (generator rests on approximately 150sf of that total). Further, along the north, east, and south is an asphalt driveway which totals approximately 3,682 sq. ft.

Both asphalt and concrete paving is in Average market condition.

The adjacent parcel (parcel #276-1644-3000) which is currently improved with a house, measures 44' x 132' and is mostly level having all municipal amenities. This site is to be level and with improvements razed prior to sale.

BUILDING DESCRIPTION(s):

The original block/brick/stone veneer structure was built around 1955 and contained approximately 3,509 sq. ft. with a glass vestibule having another 60 sq. ft. There are a series of offices, break room, former drive-up window, 10' x 12' vault, restrooms, and conference room. A slab foundation (with frost wall) is under the original structure. Later, a 4-bay garage was enclosed/constructed (1,668sf) having four automatic openers (two doors are 10' and two are 11') & the garage is climate controlled. Around the year 2000, a 3,012 sq. ft. addition was constructed having a partial, span-crete basement (electric-fired overhead heating unit in this room). This addition contains more offices and computer system equipment storage, as well as the board/conference room. The total Gross Building Area is: 9,529 sq. ft. which is divided as follows:

Office Area:	6,521sf
Garage Space:	1,668sf
Basement:	1,280sf
Glass Entry:	60sf

There are two mechanical rooms (above-grade), a separate climate controlled room, vault, 3-1/2 half-bathrooms (two are newly renovated and handicap accessible; one is older and used for storage), a reception area, a customer seating area, a former drive-up window room, six walled offices, two separate open office areas, a break room, and large conference/board room (32' x 21') with sink/counter bar and "Wall-talker" wallpaper writing board.

The mechanicals consist of forced air/central air, natural gas-fired units (all newer, except hanging furnace in garage), a single air-to-air heat pump. Electrical is 400-amp single phase, which is upgradable to 600-amp, per Mr. Clark. The original structure is block (10' height); newer structure has 2x6 steel studs on the exterior with 4-inch brick veneer (steel studs on the interior as well), drop tile ceiling, sheetrock interior walls, slider windows, commercial carpeting/tile flooring, and EPDM roofing (extremely durable synthetic rubber roofing membrane (no aggregate) which is approximately 20 years old with 10 years remaining on the warranty. Finally, the building has all access control doors, fiber optics and coaxial cable, and an 60kw diesel generator.

Mr. Clark informed Appraiser the two bathrooms were updated around 2018, HVAC is newer for the most part, and the majority of asbestos has been removed from the building. Further, there are no environmental issues with the property. Appraiser is making an <u>EXTRAORDINARY ASSUMPTION</u> to the fact of no environmental issues, or if any are discovered, the site is made "environmentally-clean".

Overall market condition and quality of subject property is Good.

A sketch is provided on the following page.



DIRECT SALES COMPARISON APPROACH TO VALUE (Lnd/Bldg)

EEATH IDE	CUDICCT DDDDCCT			1								
Address 1027 N	SUBJECT PROPERTY	COMPARABLE	SALE NO. 1	COMPARABLE SALE NO. 2		COMPARABLE SALE NO. 3		COMPARABLE SALE NO. 4		COMPARABLE SALE NO. 5		
Richland Center, WI 53581		2160 E Main Street Reedsburg, WI 53959		1101 Main Street Onalaska, WI 54650		560 Lester Avenue Onalaska, WI 54650		3143 State Road La Crosse, WI 54601		427 Gillette Street		
										La Crosse, WI 54603		
Proximity to Subject	西部沿民主任的	24.37 miles NE		56.08 miles NW	56.08 miles NW 54 Former Associated Bank Fo		54.71 miles NW 54.71 miles NW 54.71 miles NW 54.71 miles NW 55.75		51.56 miles NW Professional Office-Dental		55.45 miles NW	
Building Usage/Name	Richland Electric	Former Plumbing	g Contractor	Former Associate							ice	
Sale/Deed Reference	n/a	WD Doc #115085	2	WD Doc #171022	0	WD Doc #1740907 V Assessor, SCW#1674763 A		WD Doc #1728662 Assessor.SCW#1589545		WD Doc #171565	9	
Data Source(s)	Int/Ext Insptn	Assessor, SCW#1	803183	Assessor,SCW#1	581526					Assessor.SCW#1	590390	
Verification Source(s)		R.Gavin-Agent,C	ounty,Assr.	B.McCarty-Agent	,County,Assr.	D.Olson-Agent,C	ounty,Assr.	J.Young-Agent,C	ounty.Assr.	C.Fox-Agent.Com	inty Assesso	
Sale Price	\$		\$ 300,000		\$ 513,000		\$ 915,000	10.11	\$ 675.000		\$ 485.00	
C.E. ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjust	DESCRIPTION	+(-) \$ Adjust	DESCRIPTION	+(-) \$ Adjust	DESCRIPTION	+(-) \$ Adjust	DESCRIPTION	+(-) \$ Adiu	
Rights Appraised	Fee Simple	Fee Simple	0	Fee Simple	C	Fee Simple	0	Fee Simple	11/2/10/05	Fee Simple	14-7 \$ Auju	
Date of Sale/Time	Present	6/28/2017	15,000	5/15/2018	15,400	2/13/2020		7/5/2019		8/7/2019	14.00	
Conditions of Sale	N/A	Cash	0	Conventional	0	Cash	0	Conventional		Cach	14,00	
Sale Concessions	N/A	No Concessions	0	No Concessions	0	No Concessions	0	No Concessions	0	No Concessions		
	1997							no concessions	-	INO CONCESSIONS		
Cash Equivalent Price	\$	ESTEROID, AU	\$ 315,000	The second second	\$ 528,400	200	\$ 915,000		\$ 675 000		¢ 400 cm	
C.E. Price/GBA	\$	\$ 50.81	Her States	\$ 109.08	and the second	\$ 117.04	+ 525,000	\$ 49.71	\$ 075,000	¢ 09.02	\$ 499,60	
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjust	DESCRIPTION	+(-) S Adjust	DESCRIPTION	+1-1 S Adjust	DESCRIPTION		> 96.93		
Net Building Area	sq. ft.	sa, ft,		sa ft	() o najust	so ft	TT-J \$ Aujust	DESCRIPTION	+(-) \$ Adjust	DESCRIPTION	+(-) \$ Adju	
Gross Building Area	9,529	6.200	99,900	4 844	140 600	7 919	E1 200	12 500	(121 500)	sq. ft.		
Net Site Area (in Acres	0.533	0.76	(6,800)	0.87	(10,000	1,010	17,500	13,580	(121,500)	5,050	134,40	
Location	AVG/Off Highway	GD/Along Hwy	(63.000)	GD/Off Highway	(105 700)	GD/Off Highway	(192,000)	0.505	-	0.602		
Type of Construction	Frame/Block/Brick	Steel	(00)000)	Frame/Block/Brk	(100,700)	Go/Orrighway	(185,000)	GD/Off Highway	(135,000)	GD/Off Highway	(99,90	
Construction Quality	GD	AVG	63.000	GD		GD		co		Frame/Brick	•	
Age	65 & 20 yrs	39 yrs		41 yrs		16 100	/45 000)	GD		GD		
Condition	GD	AVG	31 500	GD		10 YIS	(45,800)	53 yrs	-	24 yrs	•	
Parking	Le Asphalt	Ig Asphalt	52,000	La Acabalt		VERT GD	(45,800)	AVG	67,500	GD		
Extras	generator	hoist		canony		Lg Aspilait		Lg Asphalt		Lg Asphalt		
Extras	vault	none	10,000	vault		none	10,000	hydraulic lift	•	none	10,000	
Basement sf in GBA:	1280sf bsmt in GBA	no basement	10,000	2422cf hemt		none	10,000	none	10,000	none	10,000	
		no buschient		2422SI USIIIL		none		6790st bsmt.		none		
						5						
Net Adjustment (Total	in \$1	ALL	\$ 124 600	A CONTRACTOR OF	¢ 24.000							
in the formation of the			\$ 134,000		\$ 24,800		\$ (210,700)		\$ (179,000)	100 C	\$ 54,500	
Adjusted Sale Price (To	tal, in \$)		\$ 449,600		\$ 553,200		\$ 704,300		\$ 496,000		\$ 554,100	
Adjusted Sale Price/Sq.	.Ft. of Structure	States and	\$ 72.52	St. Walks and	\$ 114.20		\$ 90.09		\$ 36.52	in the second	\$ 109.73	
Weight Placed on Sale			30%	1	20%/		200/				V 103.72	

DIRECT SALES COMPARISON GRID

Weighted Average \$ 549,615 Rounded to: \$ 550,000

Adjustments/Comments on Direct Sales Comparison Grid:

Appraiser searched locally for similar comparable sales over the past 3 years, however none existed after searching private and broker sales. Therefore, the search area was expanded out to find the above five comparable sales which adequately bracket the subject property. The five sales consist of a former plumbing contractor location having retail and shop space as well as a former bank (has a vault), and professional offices. These were the best available comparable sales from which to select.

Sale #1, #2, and #5 were slightly older thus requiring time adjustment to reflect market changes from the sale date to the Effective Date of this appraisal.

Gross Building Area (total floor area of a building, including below-grade space but excluding unenclosed areas, measured from the exterior of the walls) is adjusted across the grid at \$30 per square foot and rounded to nearest \$100.

Sites are adjusted based on \$30,000 per acre. #4 and #5 sites were fairly similar to that of subject, thus no adjustment taken.

Sale #1 is located in a similar market (Reedsburg), however Sales #2 thru #5 are located in the La Crosse market, which is superior. Therefore, La Crosse market sales (#2 thru #5) have a location adjustment of 20% downward. Sale #1 has a location adjustment, despite being in a similar market, merely for being located along the main highway through the community, whereas subject is not, thus a 20% downward adjustment due to increased visibility.

Sale #3 had lower Effective Age to that of subject, thus adjusted accordingly.

Sale #1 was an inferior quality steel building, thus a 20% upward adjustment taken. The other sales were of similar overall quality to that of subject.

Sale #1 and #4 were in inferior condition to that of subject at time of sale, thus a 10% upward adjustment taken to reflect subject's superior updating. Sales #2 and #5 were in similar overall market condition to that of subject at time of sale. Sale #3 was in slightly superior condition, thus a 5% downward adjustment taken.

All sales had large asphalt covered parking lots being adequate to service the building, similar to subject.

Subject has two additional items having Contributory Value, working vault and diesel generator. The Contributory Value of each is \$10,000. All sales lacked a vault, except for sale #2 (was a bank in prior use), thus adjustment taken. Subject has a generator; Sale #1 had a 8000 lbs vehicle hoist included with the sale which has similar Contributory Value; Sales #3, #4, and #5 lacked any such improvement, thus adjusted.

Subject's Gross Building Area includes approximately 1,280 sq. ft. of space in the lower level. Appraiser selected sales with and without some space in the lower level. No adjustment is made as the space in the lower level of each sale and subject is included already in the Gross Building Area adjustment, previously.

*Note: Sale #3 was a very recent sale which was a pending sale as of the Effective Date of this appraisal and did close prior to signature date on this appraisal.

Conclusion Using the Direct Sales Comparison Approach:

Using all five (5) comparables, the following is observed-Median Adjusted Sales Price = \$553,200 Mean Adjusted Sales Price = \$551,440

Appraiser is using a Weighted Average method which assigns weight to each sale based on overall comparability. Sale #1 and #2 are the most comparable (#1 due to similar market and mixture of office/shop/garage space & #2 due to former bank with basement space included in GLA and presence of a vault), thus 30% weight each given. Next, Sale #3 is weighted at 20% as it is nearest subject property in terms of Gross Building Area. Next, Sale #5 as it is located in a residential area (multi-family area) and of similar condition and Effective Age, thus 15% weight assigned. Finally, Sale #4 is the least comparable as it is the largest property (GBA) being in a superior La Crosse market, thus only 5% weight assigned.

The Weighted Average calculates to an indicated value of \$550,000.

Therefore, I believe subject property has an Estimated Fair Market Value of \$550,000 using the Direct Sales Comparison Approach.

DIRECT SALES COMPARISON APPROACH FOR VACANT LAND

Appraiser searched the local market for vacant land sales from 2016 to the present. The following is a summary of those sales found which are used to form an opinion of value on the site, as-if vacant:

- 710 E. Kinder Street sold for \$10,000 on 11/13/2019 (Warranty Deed Document #323505, EM & J Properties to Jasen/Lori Glasbrenner). This was a 66' x 132' (8,712 sq.ft.) level, corner site on the east side of the city in a mostly residential neighborhood. The site was zoned R-1 and had all city amenities. Sold for \$1.15 per square foot.
- 380 W. 3rd Street sold for \$24,500 on 5/24/2017 (Warranty Deed Document #315887), Westby Coop Credit Union to Darcy Dobbs (REO sale, a/k/a foreclosure, sold at market level thou). This was an approximately 10,193 sq. ft. L-Shaped, Level site with a small (one car size) shed in fair condition. Garage razing cost is minimal. Site was zoned CG (Commercial General) and had all city amenities. Sold for \$2.40 per square foot.
- 101 N. Orange Street sold for \$55,000 on 7/22/2016 (Warranty Deed Document #'s 312812 and 312812 from two different sellers and one

buyer (R& J Simpson and Chester/Karen Sumwalt = Sellers; Hill Country Rentals LLC = Buyer). This was an L-shaped (17,424 sq.ft.), property along the highway just north of the new Kwik Trip property being zoned CG (Commercial General) and being level, a corner site, and all city amenities. Sold for \$3.16 per square foot.

ADJUSTMENT CRITERIA:

Adjustments are made both cumulative and additive. Cumulative adjustments are for economic elements, such as date of sale and conditions or terms of sale, so the sale can be adjusted for current market conditions or cash equivalency or unusual sale terms or financing, or sales concessions **before** additive adjustments, which are the physical elements effecting value, are made.

Sale #1:	Pre-Adjusted Price	e:	\$1.15
	Cumulative Adjus	tments:	\$0.00
	Additive Adjustme	ents:	\$0.00
	After-Adjusted Pri	ce:	\$1.15/sf
Sale #2:	Pre-Adjusted Price	e:	\$2.40
	Cumulative Adjust	tment:	\$0.14+ (time adjustment + 6%)
	Additive Adjustme	ents:	\$0.76- (commercial zoned -30%)
	After-Adjusted Pri	ce:	\$1.78/sf
Sale #3:	Pre-Adjusted Price Cumulative Adjust Additive Adjustme After-Adjusted Price	: tment: ents: ce:	\$3.16 \$0.22 (time adjustment + 7%) \$0.34 (superior location - 10%) \$1.01 (commercial zoned -30%) \$2.03/sf
Average:	\$1.65/sf	Median:	\$1.78/sf

Conclusion, I believe subject site (23,232sf), as-if vacant, has an Estimated Fair Market Value of: \$42,000 or \$1.80/sf +/-

Allocation of Site between two parcel numbers, as requested by Client: Parcel #276-1644-7000 (17,424sf) ---- \$30,500 Parcel #276-1644-3000 (5,808sf) ----\$11,500** **as-if vacant and a level graded site

APPRAISAL SUMMARY:

Land, As-If Vacant	\$ 42,000
DIRECT SALES COMPARISON APPROACH TO VALUE	\$550,000
COST APPROACH TO VALUE	Not Developed
INCOME APPROACH TO VALUE (reconciled value)	Not Developed

Therefore,

I estimate the Fair Market Value of subject property, after residence is raised on parcel #276-1644-3000 and site is readied for development (filled, graded, mostly level), as of January 28, 2020 to be:

\$550,000

Allocation: Land

Land \$ 42,000 (\$30,500 + \$11,500 (small parcel) Improvements \$498,000 Equipment (generator) \$ 10,000

Hypothetical Condition(s):

Residence is razed on adjacent property (parcel #276-1644-3000) and site is filled, graded, and mostly level.

Extraordinary Assumption(s):

Environmentally-Clean site or site will be made such at time of conveyance.

Marketing Time: 6-12 months Exposure Time: 6-12 months

Samuel Desan

Samuel J. Tesar, Jr. Wisconsin Certified General Appraiser #466-010

February 24, 2020 Date Report Signed

Appraiser Certification

- the statements of fact contained in this report are true and correct.
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- my engagement in this assignment was not contingent upon developing or reporting predetermined results.
- my compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- my analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards* of Professional Appraisal Practice.
- I have made a personal inspection of the property that is the subject of this report.
- no one provided significant real property appraisal assistance to the person signing this certification.
- Appraiser has not provided a valuation service in the past, ever, on subject property.

Somuel Desarch

February 24, 2020 Date Signed

Samuel J. Tesar, Jr. Wisconsin Certified General Appraiser #466-010

Limiting Conditions

- 1. The appraiser has no present nor contemplated future interest in the property under appraisement. The opinion expressed is in no way influenced by the fee received.
- 2. The legal description furnished the appraiser is assumed to be correct.
- 3. The appraiser believes to be reliable the information which was furnished to him by others, but assumes no responsibility for its accuracy.
- 4. The appraiser is not required to give testimony or to appear in court by reason of this appraisal with reference to the property in question, unless arrangements have been previously made therefor.
- 5. The distribution of the total valuation in this report between land and improvements must not be used in conjunction with any other appraisal and are invalid if so used.
- 6. Neither all, nor any part of the content of the report, or copy thereof (including conclusions as to the property value, the identity of the Appraiser, professional designations, reference to any professional appraisal organizations, or the firm with which the Appraiser is connected), shall be used for any purposes by anyone but the client specified in the report, the mortgagee or its successors and assignors, mortgage insurers, consultants, professional appraisal organizations, any state or federally approved financial institution, any department, agency, or instrumentality of the United States or any state or the District of Columbia, without the previous WRITTEN consent of the appraiser; nor shall it be conveyed by anyone to the public through advertising, public relations, news, sales, or other media, without the WRITTEN consent and approval of the Appraiser.
- 7. On all appraisals, subject to satisfactory completion, repairs, or alterations, the appraisal report and value conclusions are contingent upon completion of the improvements in a workmanlike manner.
- 8. The Appraiser has not made a radon gas inspection of the structures, and assumes no responsibility of such gas, if present. Appraiser has not conducted a Phase I or Phase II environmental study of site, nor has any knowledge of environmental concerns.

Samuel Desan

Samuel J. Tesar, Jr. Wisconsin Certified General Appraiser #466-010

February 24, 2020 Date Signed

Addendum

R-1 Zoning Ordinance - City of Richland Center

Location Map - Subject and Comparable Sales

Subject Photos

Comparable Photos

Appraiser Resume

Appraiser Wisconsin Certified General License/Certification

ZONING ORDINANCE FOR THE CITY OF RICHLAND CENTER

CHAPTER 402

SPECIFIC REGULATIONS AFFECTING LANDS IN THE "R-1" SINGLE FAMILY RESIDENTIAL DISTRICT

402.01 APPLICABILITY OF CHAPTER 400 TO AN "R-1" SINGLE FAMILY RESIDENTIAL DISTRICT. All of the provisions of Chapter 400 of the Zoning Ordinance of the City of Richland Center apply to lands in an "R-1" District except where the provisions of this Chapter are inconsistent with the provisions of Chapter 400, in which case the provisions of this Chapter shall be deemed controlling.

402.02 PERMITTED USES IN AN "R-1" SINGLE FAMILY RESIDENTIAL DISTRICT. The following uses are permitted uses in an "R-1" District:

(1) Single family dwellings [Amended by Ord 1997-15]

(2) Public parks and playgrounds.

(3) Home occupations as defined and regulated by this Zoning Ordinance.

(4) Family day care homes.

402.03 PERMITTED ACCESSORY USES IN AN "R-1" DISTRICT. [As Amended by Ord 2015-1] No accessory structure or use of land shall be permitted in an "R-1" District except for one or more of the following:

(1) Unenclosed parking spaces and carports for passenger cars.

(2) One private garage not exceeding 768 square feet in area or 15 feet in height.

(3) One accessory building other than a private garage which does not exceed 120 square feet in area. A shipping container shall not be used as an accessory building in an R-1 zoning district nor shall a shipping container be placed for any other purpose on a lot in an R-1 zoning district. [Amended by Ord 2017-5]

(4) Decorative landscape features.

(5) On-premises signs as regulated by this Zoning Ordinance and by any other ordinance or

Oct 31, 2017

402-1

Chapter dealing with the regulation of signs.

(6) Private swimming pools, tennis courts or similar recreational activity intended for the primary use of the dwelling located on the same site as such recreational use, and not for hire or held open to the public.

(7) A parking canopy may not be used as an accessory building nor shall a parking canopy be placed for any other purpose on a lot in an R-2 zoning district. [Added by Ord 2017-5]

(8) A portable garage may not be used as an accessory building nor shall a portable garage be placed for any other purpose on a lot in an R-1 zoning distriict. [Added by Ord 2017-5]

402.04 CONDITIONAL USES IN AN "R-1" DISTRICT. None of the following uses shall be permitted in an "R-1" District except with a Conditional Use Permit:

(1) Not more than one (1) additional dwelling unit located entirely within an existing residential structure on the lot, in addition to the primary dwelling unit within the structure, provided such additional dwelling unit is equipped with its own complete bath and toilet facilities and with its own kitchen facilities.

(2) Churches, including those related structures located on the same site which are an integral part of the church proper, and parsonages, rectories, convents or homes for persons performing a religious function on the same site.

(3) Public schools, parochial schools, colleges and universities.

(4) Public libraries, public museums and art galleries.

(5) Municipal buildings, excepting the following: sewage disposal plants, garbage incinerators, public warehouses, public garages, public shops and storage yards, and penal or correctional institutions and asylums.

(6) Buildings used exclusively for governmental purposes whether city, county, state or federal, provided that no vehicle or equipment storage or repair shall be permitted in or abutting any such building, and also excepting the following: sewage disposal plants, garbage incinerators, public warehouses, public garages, public shops and storage yards, and penal or correctional institutions and asylums.

(7) Professional offices, provided that when permitted in this district, a professional office shall be incidental to a primary residential occupancy of the building; not more than forty per cent (40%) of the floor area of not more than one story of one building on the lot shall be occupied by such office; and only one (1) name plate not exceeding one (1) square foot in area,

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stating the name and profession of the occupant of the premises, may be exhibited.

(8) Attached garages and breezeways (with open or closed sides) located in the rear yard of a property with a rear yard setback of less than 25 feet. The total of the front and rear yard setbacks shall be at least 32 feet with the minimum rear setback being 12 feet. The structure shall meet the side yard setback requirements or be in line with the existing house. If living area accessible from the interior of the house is built above the garage the height of the garage shall not exceed the height of the house. If no living area is built above the garage the maximum height shall be 16 feet. [Amended by Ord 2002-12]

(9) Any private garage or other accessory building in excess of one of each on a lot. [Added by Ord 2015-1]

(10) Private garage exceeding 768 square feet of floor area. [Added by Ord 2015-1]

(11) Accessory building other than a private garage which exceeds 120 square feet of floor area. [Added by Ord 2015-1]

(12) A private garage with a living area above the ground floor. [Added by Ord 2015-1]

(13) Private garage or other accessory building which exceeds a height of 15 feet above ground level. [Added by Ord 2015-1]

(14) Mobile service facilities and mobile service support structures. [Added by Ord 2017-5]

402.05 LOT AREA, FLOOR AREA, BUILDING HEIGHT, LOT WIDTH AND OTHER YARD REQUIREMENTS IN AN "R-1" DISTRICT.

(1) **BUILDING HEIGHT:** No structure or building shall exceed a height of thirty-five (35) feet, except as provided in paragraph 400.09 (2) of this Zoning Ordinance.

(2) SIDE YARD: A side yard abutting a street shall not be less than twenty (20) feet in width. There shall be an aggregate of side yards for every building used for human habitation of not less than twenty (20) feet and no single side yard shall be less than eight (8) feet.

(3) SET BACK FROM STREET: The nearest point of any structure to any street right-ofway line shall be set back not less than twenty (20) feet from the right-of-way line of any public street.

(4) **TRAFFIC VISIBILITY TRIANGLE:** No fences, structures, trees, bushes, other plantings or other objects other than lawn grass, sidewalks or city utility system components or street signs, traffic signs or other signs installed by the city shall be permitted, placed or maintained within any area of a lot or boulevard abutting intersecting streets within the triangular

Oct 31, 2017

area described as follows:

A triangle, the sides of which are determined by measuring to points 33 feet along the curb lines of each of the two intersecting streets from the point of intersection of the lines of the two curbs, and the base of which is a line connecting such two points. The measurement of a curb line shall be made at the top edge of the curb where the back of the concrete curb meets the boulevard. For purposes of such measurement, where the area of the curb intersection is rounded or set back to enable handicapped access to the sidewalks, the curb lines shall be extended to the point where the extended lines intersect. Where there is no curb installed, the measurement shall be made along the edge or edges of the paved street roadway(s) closest to the lot line of the abutting property. **[From 400.04 (7)(a)]**

In the case of any lot or subdivision abutting a state trunk highway, the setback and traf visibility requirements set forth in the Wisconsin Statutes and/or Wisconsin Administrative Cc shall apply, provided that such requirements require a traffic visibility triangle not smaller than required above.

(5) **REAR YARD:** There shall be a rear yard having a minimum depth of twenty-five (25) feet.

(6) LOT AREA PER DWELLING UNIT: Every structure hereafter erected or structural altered for human habitation which contains one dwelling unit shall provide a lot area of not le than 8,000 square feet and no such lot shall be less than sixty (60) feet in width. Any structure erected or structurally altered to contain two dwelling units shall provide a lot area of not less than 4,000 square feet per dwelling unit and no such lot shall be less than sixty (60) feet in width.

(7) FLOOR AREA PER DWELLING UNIT: Every dwelling unit erected or created by structural alteration for human habitation shall provide minimum living area of eight hundred and fifty (850) square feet.

(8) DISTANCE OF DETACHED ACCESSORY BUILDINGS FROM LOT LINES:] detached accessory structure shall be located closer than the following distances from the indicated lot lines of the lot or parcel upon which it is erected:

(a) No portion of the foundation or wall shall be located less than three feet (3') from the rear lot line, and no portion of the building (including any part of the roof, eaves or eaves troug shall be located less than one and one-half (1.5) feet from the rear lot line.

(b) Where the entire accessory building is located within a rear yard, no portion of the foundation or wall shall be located less than three feet (3') from the side lot line, and no portior of the building (including any part of the roof, eaves or eaves trough) shall be located less than one and one-half (1.5) feet from the side lot line.

Oct 31, 2017

(c) Where any portion of such accessory building is located in a side yard, no portion of the foundation or wall shall be located less than eight feet (8') from the side lot line, and no portion of the building (including any part of the roof, eaves or eaves trough) shall be located less than six and one-half (6.5) feet from the side lot line.

(d) Notwithstanding the foregoing, where such side or rear lot line abuts a street, the accessory building shall be subject to the same setback requirements from such street as apply to a primary structure.

(e) Additional limitations on detached accessory buildings set forth in sec. 400.04 (5) are applicable in this district.

402.06 PERFORMANCE STANDARDS APPLICABLE TO AN R-1 DISTRICT.

(1) Exterior Storage in Residential Districts. All materials and equipment shall be stored within a building or fully screened so as not to be visible from adjoining properties or from any public street, except for the following:

(a) Laundry being dried.

(b) Recreational equipment, other than boats, canoes, snowmobiles and trailers.

(c) Boats, canoes, snowmobiles, trailers and unoccupied recreational-type campers and trailers less than twenty (20) feet in length, if stored in the rear yard and more than five (5) feet from any property line.

(d) Construction and landscaping materials and equipment currently being used on the premises for improvements to the premises, which may be stored for a period not more than forty-five (45) days, while work is actually in progress.

(e) Off-street parking of an aggregate of not more than three (3) passenger automobiles and pick-up trucks owned by residents of the premises, all of which shall be in condition to be legally operated upon the highways of the state and shall display current registration.

(f) Heating wood intended for use on the premises, but not heating wood being held for sale. Any quantity of heating wood in excess of four (4) cords shall be presumed to be held for sale. All heating wood shall be stored in the rear yard and more than five (5) feet from any property line.

(2) In addition to (1) above, all of the performance standards set forth in sec. 400.07 which are applicable to all zoning districts apply to lands in the R-1 District.

Main File No. Page # 17 of 17

Owner	Richland Co-op Electric Assn.							
Property Address	1027 N Jefferson St							
City	Richland Center	County	Richland	State	WI	Zip Code	53581	
Appraiser	Samuel J. Tesar, Jr.							

Location Map


Owner	Richland Co-op Electric Assn.			_			
Property Address	1027 N Jefferson St						
City	Richland Center	County	Richland	State	WI	Zip Code	53581
Appraiser	Samuel J. Tesar, Jr.			_			55501



Front/Side (West and South)

Side/Rear (South and East)



Asphalt Driveway around building

Another view of Asphalt Driveway

Owner	Richland Co-op Electric Assn.							
Property Address	1027 N Jefferson St							
City	Richland Center	County	Richland	State	WI	Zip Code	53581	
Appraiser	Samuel J. Tesar, Jr.						00001	



Former Drive-up station

Across front



Across Front

Street - Looking South on Jefferson

Owner	Richland Co-op Electric Assn.			_				
Property Address	1027 N Jefferson St			7(
City	Richland Center	County	Richland	State	WI	Zip Code	53581	
Appraiser	Samuel J. Tesar, Jr.							



Across Parking Lot - looking East

Street view - looking North on Jefferson



View of Generator



Another driveway view

Owner	Richland Co-op Electric Assn.							
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City	Richland Center	County	Richland	State	WI	Zip Code	53581	
Appraiser	Samuel J. Tesar, Jr.							



Residential Parcel - Rear

Residential Parcel - Front



Sample Office - New Addition

Hallway - New Addition

Owner	Richland Co-op Electric Assn.							
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City	Richland Center	County	Richland	State	WI	Zip Code	53581	
Appraiser	Samuel J. Tesar, Jr.						00001	



Conference/Board Room - New Addition

Garage



Reception Area - original structure

Hallway - Original Structure

Owner	Richland Co-op Electric Assn.		2					
Property Address	1027 N Jefferson St							
City	Richland Center	County	Richland	State	WI	7in Code	53581	
Appraiser	Samuel J. Tesar, Jr.					Lip oodo	55561	



Sitting Area - Original Structure



Mechanicals in Garage



furnace in garage



mechanicals in garage

Comparables Photograph Addendum

Main File No. Page # 14 of 15

Owner	Richland Co-op Electric Assn.					
Property Address	1027 N Jefferson St					
City	Richland Center	County	Richland	State W/I	7in Code 52501	
Appraiser	Samuel J. Tesar, Jr.		Teremana		Zip 0000 33381	



Comparable Sale #1 2160 E. Main Street - Reedsburg, WI

Comparable Sale #2 1101 Main Street - Onalaska, WI



Comparable Sale #3 560 Lester Avenue - Onalaska, WI

Comparable Sale #4 3143 State Road - La Crosse, WI

Comparables Photograph Addendum

Main File No. Page # 15 of 15

Owner	Richland Co-op Electric Assn.						
Property Address	1027 N Jefferson St						
City	Richland Center	County	Richland	State	WI	7in Codo 52501	
Appraiser	Samuel J. Tesar, Jr.		reternand	Otato	VV I	Zih cone 23281	



Comparable Sale #5 427 Gillette Street - La Crosse, WI

	E. E.	
	A Description to the second seco	
		Contraction of the local division of the loc

SAMUEL J. TESAR, JR.

sam@theappraisalcompany.biz 608-412-0426 (cell) / 608-874-4433 (office) P.O. Box 125, Eastman, Wisconsin 54626

RESUME

EDUCATION/ORGANIZATIONS

Bachelor of Business Administration Degree in Accounting granted by the University of Wisconsin-Whitewater (May, 1991)

Wisconsin Certified General Appraiser #466-10 (August 30, 1993)

Iowa Certified General Appraiser #CG02076 (February 15, 1999)

Wisconsin Real Estate Broker's License #44538

Town of Eastman Board Chairman (April 2011 til present)

Town of Eastman Clerk (April 2005 thru April 2011)

WORK EXPERIENCE

The Appraisal Company, P.O. Box 125, Eastman, WI (Jan, 1993 - Present)

- Owner/Operator (in Janesville, WI from 1993 to 1998) (in Eastman, WI from 1998 to Present)
- Appraising of residential, vacant land, residential subdivision tracts, and commercial properties which entails site inspection, data collection, and paired sales market analysis. Types of commercial property are as follows: theaters, bowling alley, motel/hotel, bar/restaurant, strip mall, retail storefront, warehouse, municipal structures, large tracts of land for development, and agricultural/recreational lands.
- Major Clients over the years

Peoples State Bank, Old National Bank, Associated Bank, Wells Fargo Bank, Kerndt Brothers Savings Bank, US Department of Veterans Administration, Wisconsin Department of Veterans Affairs, U.S. Department of HUD, USDA/Rural Housing, Merchant's Bank, Village of Ferryville, Village of Gays Mills, City of Prairie du Chien, Village of Chaseburg.

Ahrens Realty, Inc., Prairie du Chien, Wisconsin (Jan., 1986 – Jan., 1993)

- Participated in residential, commercial, and agricultural property sales.
- Assisted a Certified General Appraiser in appraising real property.

EXPIRES: 12/14/2021	The State of Wisconsin rent of Safety and Professional Services	Hereby certifies that SAMUEL J TESAR JR	was granted a certificate to practice as a ENERAL APPRAISER ELIGIBLE TO APPRAISE FEDERALLY	LATED TRANSACTIONS IS AQB COMPLIANT	in the State of Wisconsin in accordance with Wisconsin Zaw on the 30th day of August in the year 1993.	bority granted herein must be renewed each biennium by the granting authority. In witness thereof, the State of Wisconsin Denartment of Saletu and Prolessional Services	has caused this certificate to be issued under its official scal.		Aun B. M.
	Department of		CERTIFIED GENERAL	RELATED T	in the State on t	The authority granted 1 Den		STATUTE OF WISCONDER	S32UUUUSS TATION SIGNAL ON THE SIGNAL OF THE

This cortificate was printed on the 6th day of December in the year 2019

-14 DEPT. C







Richland County Committee

Agenda Item Cover

Department	Administration	Presented By:	Administrator
Date of Meeting:	July 6 th , 2021	Action Needed:	Vote
Disclosure:	Open Session	Authority:	Structure D and E
Date submitted:	July 1 st , 2021	Referred by:	
Action needed by no later than (date)	N/A	Resolution	N/A, prepared, reviewed

Agenda Item Name: 2022 Operational Budget Guidance

Recommendation and/or action language:

1) Motion to ... adopted 2022 operational budget guidance and budget packet, and to disseminate to departments and partners.

Background: (preferred one page or less with focus on options and decision points)

In efforts to direct and manage a process that results in the successful adoption of a budget that meets the counties priorities for 2022, a proposed budget guidance packet is prepared for consideration and action. The document lays out the goals, constraints and expectations the departments will adhere to in creating a preliminary budget and advocating for services.

Items in this document are intended for distribution on July 7th and follow on Committee action in accordance with the proposed timeline.

Attachments and References:

2022 Operational Budget Guidance	2022 Short-term Capital Improvement / Projects
2022 Operation Budget Summary	

Financial Review:

(please check one)

· ·						
	In adopted budget	Fund Number				
	Apportionment needed	Requested Fund Number				
	Other funding Source					
	No financial impact					

(summary of current and future impacts)

Impacts all budgets for the 2022 year.

Approval:

Review:

Clinton Langreck

Department Head

Administrator, or Elected Office (if applicable)

2022 Budget Objectives and Guidance

Budget Objectives:

The Richland County Administrator and the Finance and Personnel Committee are committed to a countywide 2022 budget that will meet the following objectives:

Levy:

• Meet the operating levy limit as imposed by the State of Wisconsin

Services:

- Within operating levy limit, protect the effective delivery of essential services
- To the greatest extent possible, maintain current discretionary services provided directly by the county and/or through partnerships

Response to COVID-19 Impacts:

• Utilize American Rescue Plan in accordance with federal guidance to best suit the needs of the County

Capital Improvements and Capital Outlays:

- Within the operating levy limit, maintain the county's infrastructure to ensure that future boards do not have to react to aging and broken systems causing frequent sharp rises in property tax levy and rate
- Continue annual short-term loan financing for a capital improvements and capital outlay program that identifies and prioritizes projects and equipment over \$5,000

Preservation of Undesignated General Fund:

• Strive to build and maintain an appropriate minimum undesignated general fund balance of 25% of annual general fund operating budget

Wages and Benefits:

- Meet projected increases and adjustments in health insurance premium costs and fringe benefits
- Make incremental adjusts in employee wages to progress towards the goal of obtaining market value as determined through 2018 study, Resolution 19 89

Office of Clinton Langreck, County Administrator

Budget Challenges and Assumptions:

The following challenges and assumptions are factored in the planning and guidance of the 2022 budget:

- 1. Chapter 54 and Chapter 44 Adult and Child placements: Increase expenditures by \$800,000 estimate
- 2. Land Conservation: Inclusion of Land Tech and Rent: \$75,000
- 3. Unfunded mandate for District Attorney Office: \$65,000 estimate
- 4. Incorporate wages in Zoning and Land information with reduced use of Land Information Grant: \$25,000
- 5. Applied funds from Pine Valley Revenue Amount: To be determined
- 6. Applied funds from Pine Valley Reserves: Amount: to be determined
- 7. Increases in Wages = General (estimated \$459,994.32), Pine Valley (estimated 251,400.90)
- 8. Estimated levy increase from Net New Construction: \$35,000
- 9. Anticipating potential use of general fund surplus to address gaps.
- 10. American Rescue Plan May have access to funds for select projects.

To place context to the current budgeting objectives, the next section provides a brief summary of the 2021 Richland County Budget.

2021 Richland County Budget Summary:

2021 Budget (Expenses)	\$33,780,122.50	(an increase of \$1,224,808.26)
2021 Budget (Revenue)	\$24,339,064.76	(an increase of \$637,708.49)
Tax Levy	\$9,441,057.74	(an increase of \$587,099.77)
General Fund Applied	\$0	
General Fund as of Dec 20	19 \$4,785,283	(an increase of \$856,581 from

(an increase of \$856,581 from 2018)

2021 Budget Includes:

- 3.9% increase in health insurance
- Matching an EDA Grant for Strategic Planning through Southwest Regional EDA Grant
- \$34900,000 contribution from Pine Valley for Contingency Fund
- \$1,050,000 in short-term borrowing for capital improvements / projects •

Fund Assignments

Office of Clinton Langreck, County Administrator

ind	Budget Responsibility	Fund	Budget Responsibility
LO	Multiple	56	HHS
	Administrator	57	Fair & Recycling
2	County Clerk	58	Administrator
	Administrator	59	HHS
ļ	County Clerk	60	UWR Food Service
5	Sheriff	61	PVCV
6	Ambulance	62	Administrator
7	Sheriff	63	HHS
8	ADRC	64	Land Conservation
)	Sheriff	65	County Parks
)	Extension	66	Land Conservation
	Clerk of Court	67	Land Conservation
	Register of Deeds	68	Fair & Recycling
	Zoning	69	County Parks
	Register of Deeds	70	NOT USED
i	Sheriff	71	Highway
5	Sheriff	72	Land Conservation
	NO LONGER USED (PER AUDITORS)	73	Land Conservation
	County Treasurer	74	Ambulance
	MIS	75	Administrator
	Administrator	76	Sheriff
	Clerk of Court	77	Land Conservation
	Administrator	78	Land Conservation
	Fair & Recycling	79	Land Conservation
	HHS	80	Land Conservation
	Sheriff	81	County Clerk
	Symons	82	Administrator
	Symons	83	Administrator
	NOT USED SINCE 2013	84	Veterans Service
	Administrator	85	Administrator
	HHS	86	County Treasurer
	HHS	87	Administrator
	MIS	88	Administrator
	Administrator	89	Administrator
	HHS	90	Administrator
	NOT USED SINCE 2012	91	NO LONGER USED
	Sheriff	92	Administrator
	Ambulance	93	NOT USED
	Zoning		
	Ambulance		
,	Ambulance		
	Ambulance		
	County Parks		
5	HHS		
	HHS		

Office of Clinton Langreck, County Administrator

Timeline of Budget Process:

Phase 1: Preliminary Budget

7/6/2021 Finance and Personnel Committee — approves finalized: 1) budget timeline, 2) budget packet, 3) budget objectives and 4) budget guidance

7/7/21 Administrator's Office — distributes copies of the budget timeline, packet documents and budgeting guidance to all departments and County funded organizations. Departments may begin presenting to supervisory committees. Supervisory committees may take action to recommend budget to Finance and Personnel within budget guidance.

7/15/21 Administrator — Conducts a department head meeting to discuss 2021 budget expectations, guidance, questions and concerns

7/30/21 Departments — submit their completed 2022 proposed budget documents to the County Administrator's Office

8/01- 8/19 County Administrator's Office — enters the budget numbers and summarizes the budget information for Administrator, Department Heads and the Finance and Personnel Committee

8/20/2021 Administrator — presents preliminary budget to the Finance and Personnel Committee

Phase 2: Department Reviews with Administrator and Finance and Personnel Committee

8/23- 9/01/21 Department Presentations to the County Administrator and Finance and Personnel Committee:

Tuesday, 24 Aug 2021 (Primary) -

Health & Human Services	8:00am
County Administrator	8:30am
Ambulance Services / Emergency Management:	8:45am
Highway	9:00am
Child Support:	9:30am
Circuit Court:	9:45am
Coroner:	10:00am
Sheriff's Department	10:15am
Corporation Counsel	10:45am

Office of Clinton Langreck, County Administrator

County Clerk's Office	11:00pm			
District Attorney's Office	11:15pm			
Pine Valley Community Village:	11:30			
UW Extension Office	12:00pm			
Fair & Recycling	12:15pm			
Land Conservation	12:45pm			
MIS	1:15pm			
Register in Probate	2:00pm			
Register of Deeds	2:15pm			
Symons Recreation Complex	2:30pm			
Treasurer's Office	2:45pm			
UW Food Services	3:00pm			
Veteran's Services	3:15pm			
Zoning	3:30pm			
Courthouse	4:00pm			
UW Campus	4:15pm			
Wednesday, 25 Aug 2021 (Alternate and call-back) Thursday, 26 Aug 2021 (Alternated and call-back)				

Additional Guidance:

All Department Heads – Will be expected to present a budget under the conditions set forth in this guidance document. Departments are expected to bring forward recommendations on best utilization under constraints and recommendations and costing to expand or restore functions.

Child Support – Reapportionment of Child Support Attorney Fees anticipated from 20/80 to 10/90.

Budget Guidance and Instructions:

The following guidance is provided by the County Administrator with approval of the Finance and Personnel Committee.

Operations and Salaries Budgeting:

Office of Clinton Langreck, County Administrator

The department heads are instructed to draft preliminary budgets with a 0% increase in levy use, from salaries, fringes, contracts, operations, without consideration for capital outlay as follows:

Department:	% Increase / Decrease of Levy
County Administrator	0%
Ambulance Services / Emergency Management:	0%
Child Support:	0%
Circuit Court:	0%
Coroner:	0%
Corporation Counsel	0%
County Clerk's Office	0%
Courthouse	0%
District Attorney's Office	0%
UW Extension Office	0%
Fair & Recycling	0%
Health & Human Services	0%
Highway	0%
Land Conservation	0%
	00/
MIS	
Pine Valley Community Village: \$ amount returned to General or	Debt Service - TBD
Register in Probate	0%
Degister of Deeds	00/
Showiff's Denoutment	0%
Summer Degratine Complex	0%
Symons Recreation Complex	0%
Treasurer's Office	0%
UW Food Services	0%
UW Campus	0%
Veteran's Services	0%
Zoning	0%

If a 0% levy increase requires reduction in service/staff hours, then please budget and plan with those reductions. Waivers to exceed the 0% guidance may be addressed through the review process with the Administrator and Finance and Personnel.

Office of Clinton Langreck, County Administrator

Wage Step Increases:	Preliminary budgets will be prepared with wage increases reflecting the aged wage schedules (averaging 6.88%) increase effect for the first day of the first full pay period of 2022. Wage schedules to be released with budget document.
Health Insurance:	Preliminary budgets will be prepared with a <u>7% increase</u> : Wallace Cooper and Elliot will be working with Quartz on a renewal. The county's experience history and market factors will have impacts of which are unknown at this time.
FICA — 2021:	Preliminary budgets will be prepared with 2020 FICA rates. This may be adjusted during the review phase when numbers are confirmed.

Wisconsin Retirement System – 2021 Rates:

me RICHLAND CO mber 0038-000	DUNTY						
nber 0038-000							
			General	g			
Calendar Year	Employee Required	Benefit Adjust	Employer Required	Prior Service	Duty Disability	Sick Leave	Total
2021	6.75	0.00	6.75	0.00	0.00	0.00	13.50
2022	6.50	0.00	6.50	0.00	0.00	0.00	13.00
		Elected Offic	ials, Judges, State Executive	Pay Plan			
Calendar Year	Employee Required	Benefit Adjust	Employer Required	Prior Service	Duty Disability	Sick Leave	Total
2021	6.75	0.00	6.75	0.00	0.00	0.00	13.50
2022	6.50	0.00	6.50	0.00	0.00	0.00	13.00
		Br	staative with Cosial Coourity				
Calendar Vear	Employee Pequired	Repofit Adjust	Employer Paguired	Prior Convice	Duty Disability	Sick Leave	Total
2024	e 75	Denent Adjust	tinployer Required	Prior Service	Duty Disability	SICK Leave	19.50
2021	0.75	0.00	11.75	0.00	0.09	0.00	10.59
2022	6.50	0.00	12.00	0.00	0.04	0.00	10.04
		Prot	ective without Social Security	<i>h</i> .			
Calendar Year	Employee Required	Benefit Adjust	Employer Required	Prior Service	Duty Disability	Sick Leave	Total
2021	6.75	0.00	16.35	0.00	0.09	0.00	23.19
2022	6.50	0.00	16.40	0.00	0.04	0.00	22.94
						A.	
			Teachers				
Calendar Year	Employee Required	Benefit Adjust	Employer Required	Prior Service	Duty Disability	Sick Leave	Total
2021	6.75	0.00	6.75	0.00	0.00	0.00	13.50
	0.50	0.00			0.00		10.00

Capital Improvements / Capital Outlay Budgeting:

All capital assets (\$5,000 or more) will be considered separately from the other expenditures and collectively within the county. Please use the provided Capital Improvement Capital Outlay planning spread sheets to submit your planning requests. Annual short-term loan financing is being explored to possibly help the county in engaging in needed capital improvements and capital investments. These expenditures will be accounted for in a separate fund (exception: Pine Valley and Highway will include capital projects and equipment in their budgets, but will submit a capital planning worksheet for tracking).

Office of Clinton Langreck, County Administrator

Budget Packet:

The 2022 Richland County Budget Packet will include the following items:

- 1. Budget Work Sheets (as distributed by the Administrator's Office in excel format) [Exception: Pine Valley and Highway]
- 2. Department Budget Summary (as distributed by the Administrator's Office)

Consideration Factors in Allocations and Continued Services:

• There may be impacts and changes in guidance once the 2020 audit report and closing are completed.

Packet Instructions:

Preliminary Phase:

The preliminary budget will be distributed via excel. Templates should not be altered. The intensions of the preliminary budget phase are to: 1) gauge departments' abilities to provide services within guidance limits, and 2) lay groundwork for adjustments as unknown financial factors (audit close, health insurance, future revenue projections, etc.) materialize.

Departments will complete Budget Worksheets as has been performed in past years. Budget Worksheets will be distributed in Excel format from the Administrator's Office. In addition, the Departments will complete the Department Budget Summary document intended to give a brief overview of department expenditures, revenues, funding sources, impacts on services and recommended restorations or expansions. The summary document is in Microsoft Word format will be submitted to departments electronically. All packets will be submitted to the County Administrator's Office (Josh Bell, CC: Clint Langreck and Derek Kalish) in accordance with the budget timeline.

Review Phase:

Departments will meet with the County Administrator and Finance and Personnel Committee to review budgets. Health insurance proposals will be considered. Loan funding options for capital improvements and capital outlays will be considered. Department services prioritization will be identified and possible reductions and/or increases to services will be considered. Budget adjustments from the review with the Finance and Personnel Committee and Administrator will be submitted to the County Clerk in revised packets in accordance with the budget timeline.

Office of Clinton Langreck, County Administrator

Hearings and Finalized Budget Phase:

The intensions of the hearings and finalization phase are to present to the County Board members for adoption.

Closing Remarks:

This will be a revised approach from the 2021 Richland County budgeting process. With several major financial factors still unknown, apportionments and plans may adjust several times throughout the process before we arrive at a final resolution to take to the County Board. Our goal through this process is to adhere to the established budget objectives and continue to meet the service needs of the community.



2022 Budget Summary

Department: Fund(s) Assigned In County Budget:

Please answer the questions below to complete the 2022 Budget Summary for your department/program. All proposed budget documents (Budget Summary & Budget Worksheets) must be submitted to the County Administrator's Office no later than <u>4 P.M. on July 30, 2021</u>.

1.) Please provide a brief department/program description and a summary of the department/program functions and service provided to the community.

2.) List the mandated functions and services provided by the department/program.

3.) List the non-mandated services and functions provided by the department/program.

4.) Explain the department/program's major goals or projects intended with the 2022 budget apportionment.

5.) Summarize the impact of the 2022 budget guidance to the department/program.

6.) Summarize the department/program's services and staffing adjustments in response to the 2022 budget guidance. Include a list of reduced or eliminated services, expanded or added services, and any collaborative, outsourced or creative solutions to maintain services.

7.) Summarize the cost impact to restore services to 2021and provide recommendations on how to do so.

8.) List any anticipated capital improvements, projects from Fund #75 (capital projects) and Fund #92 (short-term borrowing).

9.) List any recommendations given from supervisory committee.

10.) List any future operational changes needed (ex: state/federal mandates) or requests for consideration.

Richland County Committee

Agenda Item Cover

Department	Administration	Presented By:	Barbara Scott
Date of Meeting:	07/06/2021	Action Needed:	Resolution
Disclosure:	Open Session	Authority:	Rule 14
Date submitted:	06/28/2021	Referred by:	LEJC June 23rd, 2021

Agenda Item Name: Radio Tower Analysis Contract

Recommendation and/or action language:

Motion to ... recommend resolution by the Richland County Board to accept the proposal for consulting services from True North Consulting Group, regarding the County Radio and Tower analysis and improvement phase 2, for an amount not to exceed \$21,000, from Short-term Capital Fund #92 line 8.

Background: (preferred one page or less with focus on options and decision points)

Richland County emergency radio and tower infrastructure is aging, with multiple components past recommended lifespan. The Radio Tower system also has significant dead spots due to topography and limitation of current equipment. The limitations impact our communication with patrol, emergency response and fire-fighting partners and overall jeopardizes public safety when communications fail.

\$45,000 is currently appropriated through our Short-term Capital Fund #92 line 8 for "Tower/Radio (Assessment and Specification Design)." The proposed \$21,000 bid would allow us to undergo a phase two "Design Development." (Ref True North Bid, page29). The second phase of "Design Development" estimates at \$14,000-\$26,000 and may fit into our current apportionment. The completion of phases two will give us an estimate on solution costs and a specification design to put out for construction and implementation bid.

Three vendors solicited bids and interviewed before the LEJC Committee on January 8th: Evans, TUSA, True North; with True North selected by unanimous decision of the LEJC Committee.

Attachments and References:

True North Proposal – Prepared by Mike Day	Additional information available in LEJC	
	committee folder 2021/01 Jan/Com. System	

Financial Review:

piea	please check one)					
Х	In adopted budget	Fund Number	Fund # 92; Line 8			
	Apportionment needed	Requested Fund Number				
	Other funding Source					
	No financial impact					

(summary of current and future impacts)

\$21,000 of allotted \$45,000 line.

Approval:

Review: Clinton Langreck

Department Head

Administrator, or Elected Office (if applicable)

RESOLUTION NO.20-

A Resolution Approving A Contract With An Engineering Firm Relating To Repairing The County's Emergency Radio And Tower Infrastructure.

WHEREAS the County's emergency and radio tower infrastructure is aging and significant improvements need to be done to it to improve the County's communication with patrol, emergency response and firefighting units in order to ensure public safety at all times, and

WHEREAS Phase 1 evaluation is completed and the Law Enforcement and Judiciary Committee has recommended proceeding to Phase 2 Design Development which the Committee believes is in the County's best interest, and

WHEREAS the Finance and Personnel Committee has carefully considered this matter and is now presenting this Resolution to the County Board for its consideration.

NOW THEREFORE BE IT RESOLVED by the Richland County Board of Supervisors that approval is hereby granted for the contract proposed by Tru North Consulting Group, Inc. of Milwaukee, to undergo a Phase 2 Design Development relating to the County's emergency radio and tower infrastructure at a cost of \$21,000, and

BE IT FURTHER RESOLVED that funds to carry out this Resolution shall come from the Short Term Capital Borrowing Fund (Fund #92) and approval is hereby granted for the County Administrator to sign on behalf of the County the contract proposed by Tru North Consulting Group, Inc. for this work, and

BE IT FURTHER RESOLVED that this Resolution shall be effective upon its passage and publication.

VOTE FOR FOREGOING RESOLUTION

RESOLUTION OFFERED BY THE FINANCE AND PERSONNEL COMMITTEE:

AYES	 NOES	

RESOLUTION

COUNTY

DATED

_ _ _ _ _ ___ _ _



RICHLAND COUNTY, WISCONSIN

Public Safety Radio System Assessment

Project 21-0318

June 14, 2021

Mike Day mike.day@tncg.com | 651-705-1256

True North Consulting Group

140 Third Street | Stillwater, MN 55082 | 651-430-2772 | www.tncg.com



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1 OBJECTIVE STATEMENT

Richland County Wisconsin has retained the professional services of True North Consulting Group (TNCG) to develop an assessment study of their current public safety radio systems. The goal of this project is to complete a review of existing system infrastructure, perform an analysis, and develop recommendations for the possible design and implementation of a replacement system. The intent is to ultimately provide reliable radio coverage throughout Richland County and adjoining areas where emergency response agencies need to rely on these systems to perform their duties.

This study provides a technical review and evaluation of the emergency communications equipment, facilities, system management, and overall design. Existing system documentation was collected and provided to TNCG then reviewed against equipment layouts. Work was done to develop an understanding of the current interoperability capabilities and needs with adjacent county agencies, the State of Wisconsin, and other mutual aid requirements. Details of all existing practices were identified and evaluated with comparison to system best practices known to be implemented today with modern public safety systems. Finally, coverage modeling was performed to provide a visual understanding of the challenges various equipment/systems perform at in operation today.

This report provides the County with multiple practical recommendations of possible upgrade and/or replacement system options offering the baselines needed to understand solutions to address user needs. Each offered option provides a budgetary estimate of what implementation costs could be in a practical design of the system presented. Using these options as a guide for further discussions and practical analysis, the County will drive the development of a plan and identify needs vs. wants to address the key concerns. Some recommendations and challenges to this process have been detailed to provide guidance from experiences learned on previous projects by TNCG.

2 EXECUTIVE SUMMARY

Richland County operates at multiple sites with VHF analog repeaters throughout the County to provide local coverage of an area for public safety radio communications. These repeaters are dedicated to an identified service such as Law and Fire to support those agencies. Each agency repeater shares common frequency operation at the various sites and uses a different squelch code to operate that station. The system is then supplemented with additional mutual aid and simplex (ground) channels for operations as well. Equipment is constructed at seven (7) various locations throughout the County, however not all locations operate the same configurations.

Within the County the Richland Sheriff's Department operates the only public safety answering point (PSAP) that provides 911 call receiving and dispatch services for coordinating emergency responders. The center provides for two (2) dispatch furniture positions but staffing often is provided by a single dispatcher on duty throughout a dedicated shift. Also supporting jail operations from this location, additional personnel and duties are engaged at the center.

Emergency service agencies responding to calls are divided up in the three standard groups of Law, Fire, and EMS providing coverage to county areas. Many of the various agencies provide services outside the county borders as well as into neighboring counties such as Fire and EMS services and tend to rely on other radio channels or ground channels when operating far beyond county borders.

2.1 OBSERVATION POINTS

- The current County system implementation has come about as a product of identifying needs and obtaining solutions without a common overall goal in consideration. Reversing this process will be challenging without a complete forklift replacement of the system or a final plan to work backwards from.
- The 911 center's radio communications capabilities systems were provided from a neighboring County (used) and have served a number of years in Richland and are no longer supported by the manufacturer.
- With the operation of multiple repeater systems on common frequencies no system limitations are available for devices interfering with each other and possibly causing lost communications. It is difficult to understand and define the possible ramifications of operating this type of system.
- Countywide planning and governance functions of emergency communications equipment and operations needs to be improved to ensure any migration.
- 911 radio dispatch consoles provide key Jail access/control and intercom operations. These system need to be separated to ensure better reliability and vendor support.

- Richland County subscriber equipment needs to be brought up to a more robust public safety level of standards assuring reliability and timely performance testing.
- With any upgrade, every effort should be made to reduce the complexity for public safety officers and dispatchers to allow the communications to quickly, effectively and efficiently be delivered.
- With the County's terrain, design challenges to minimize tower sites and maximize coverage will be difficult. Reaching public safety standards may be difficult without major civil investments.

2.2 TNCG'S RECOMMENDATION

Option Description of Improvement E		Estimated Cost	Outcome
1	 ✓ VHF Analog Repeater Stations (X2 per site) ✓ Dedicated Paging 	\$3,280,500	This lowest cost option provides for improving operational coverage of the
	operation is part of the design		existing design. Using this option would
	 Coverage levels are improved Countywide 		have the County seeking a migration strategy to the extent possible of the
	 Greenfield site likely needed 		existing system.
	 ✓ Voting/Simulcast Controller Systems 		levels would not be achieved with this option
	 ✓ Transmit/Receive Antenna Systems 	\frown	without design changes and additional cost.
	✓ Transmit/Receive Antenna Combining System		Sites are designed with dedicated shelter space and
	 Site shelter, grounding and structure enhancements 		backup power capabilities (Hardened).
	✓ Battery back -48-volt power systems	Ċ.	Subscriber equipment has not been estimated as part
	 Backup AC generator at all sites 		of this possible phased approach with reuse being probable. Likely cost
	 Minimal microwave network connection to all sites 		savings of at least \$1M.
	 Site and system alarm capabilities 		design that may not be able to easily expand coverage
	Console X2 and associated radio equipment upgrades		levels down the road.

2.3 BUDGETARY COST - RADIO SYSTEM OPTION 1

Option	Des	cription of Improvement	Estimated Cost	Outcome
2	✓ ✓	VHF Digital P25 repeater stations (X3 per site) Standalone analog paging base station system	\$5,792,000	This option seeks to improve the Option #1 design coverage using a digital operation.
	√ √	Coverage levels improved to 90% on the street portable on the hip. Console X2 and associated		A migration to P25 operation would provide the County improvements and capabilities of designed system coverage
	√ √	radio equipment upgrades Public Safety grade P25 capable subscriber radios		Improvements include new system support of improved P25 capabilities.
	✓	Controller Systems Transmit/Receive Antenna Systems	\square	Subscriber radio equipment has been estimated for replacement to provide P25
	~	Transmit/Receive Antenna Combining System		operations. Subscriber equipment would support County and
	\checkmark	Site shelter, grounding and structure enhancements	$\mathbf{\dot{\mathbf{O}}}$	WISCOM operations.
	~	Battery back -48-volt power systems		design that may not be able to easily expand coverage
	~	Backup AC generator at all sites		levels down the road.
	V	Microwave ring network connection to all sites		
	~	Site and system alarm capabilities		
		P25 digital operation with noise-cancelling capabilities, Encryption, etc.		

2.4 BUDGETARY COST - RADIO SYSTEM OPTION 2

Option	Description of Improvement	Estimated Cost	Outcome
3	 ✓ VHF Digital P25 repeater stations (X5 per site) 	\$7,710,000	Seeking to meeting in building public safety
	 P25 paging operation and subscriber equipment 		coverage levels with design. This option seeks to
	 ✓ Console X2 and associated radio equipment upgrades 		improve the Option #2 design by adding coverage
	 ✓ Public Safety grade P25 capable subscriber radios 		with additional sites. A migration to P25
	 ✓ Voting/Simulcast Controller Systems 		operation would provide the County improvements
	 ✓ Transmit/Receive Antenna Systems 		system coverage.
	 ✓ Transmit/Receive Antenna Combining System 	$\langle \rangle$	Improvements include new system support of improved P25 capabilities.
	 Site shelter, grounding and structure enhancements 		Subscriber radio equipment has been estimated for
	 Battery back -48-volt power systems 	5	replacement to provide P25 operations.
	 Backup AC generator at all sites 		Paging operations is moved to P25 systems and pager
	 Ring topology microwave network connection to all sites 		equipment replacement is anticipated.
	 Site and system alarm capabilities 		
	 P25 digital operation with noise-cancelling capabilities, Encryption, etc. 		

2.5 BUDGETARY COST - RADIO SYSTEM OPTION 3A
3 OVERVIEW

3.1 RADIO SYSTEMS

Richland County public safety two-way radio users rely on various capabilities of a multiple site narrowband VHF analog architecture. The core components supporting the main law and fire agency channels are standalone repeaters operating on common reused frequencies. These repeaters are dedicated to their identified service and provide localized coverage of the area they are in based on the implementation characteristics. Each repeater shares a common transmit and receive frequency operating at the various sites and uses a different receive squelch code to enable only that station. All repeaters share a common transmit squelch code allowing the field units an ability to receive from any of the various agency channels. Law and Fire repeaters are constructed at five (5) various locations throughout the County.

Agency voice paging operations is supported in the County as well using analog VHF operations and two-tone encode format. Encode activation using a two-tone format is sent via the County dispatch console system dedicated to the agency for decode by each agency's pager devices. Paging operations are supported mainly using a wireline controlled base station unit operating on the Tower Hill – USCC Site. A secondary repeater system is located on the Lone Rock Site and uses a unique frequency and code to repeat the operations locally on the Paging channel.

Finally, the system is then supplemented with additional mutual aid and simplex (ground) channels for operations as well. Local, State of Wisconsin, and national channels were identified supporting field users and the dispatch center.

Sites include a mix of tower structures and water tanks providing antenna height for mounting antenna systems using omni-directional gain antennas and 3/4" coaxial cable runs. Locations seem to be chosen based on need and availability of structures in the area using favorable siting practices. No sites were found to be owned by Richland County and many shared equipment spaces were found supporting the system.

Repeater and base station equipment from various vendors and with varying models indicate system expansion and replacement on an as needed basis.

3.2 PSAP

Within Richland County, the Maquoketa police department operates the county's only public safety answering point (PSAP) that provides 911 call receiving and dispatch services for coordinating emergency responders. The center provides for two (2) dispatch furniture positions but staffing often is provided by a single dispatcher on duty throughout a dedicated shift.

3.2.1 RICHLAND COUNTY SHERIFF DEPARTMENT

The only Richland County 911 Public Safety Answer Point (PSAP) is located at 181 West Seminary Street within the City of Richland Center. The PSAP is located at the County courthouse building on the 2nd floor inside jail area and serves to provide both 911 dispatching and jail control operations. The dedicated area provides space for two dispatch furniture positions along with some equipment support space in a lower area. The room is access via the jail entrance but also stands behind the Sheriff department hallway glass entrance. This allows the dispatchers to also perform receptionist duties to the public as needed.

For radio communication capabilities the PSAP is equipped with two (2) each dispatch consoles that are computer-based systems. These provide operations using a dedicated software program operating on the computer screen and are supported by an audio control device for microphone and speaker operation. These client computers are interfaced to a dedicated electronics rack providing equipment interfacing that resides in the basement equipment closet.

This computer-based console system interfaces to various radio station equipment via wireline control using analog tone control operation. Station equipment is located at the site in the penthouse equipment room and supported by rooftop antenna systems. These provide the operation pathways to accessing all remote repeater devices located throughout the County. Other local equipment located at the Tower Hill – USCC Site is controlled using a wireline (Telco) connectivity between the console systems and the site.



4 SYSTEM USERS

4.1 SERVICE BOUNDARIES

Richland County divides its emergency service agencies up in the three standard groups of Law, Fire, and EMS providing coverage to county areas. Many of the various agencies provide services outside the county borders as well as into neighboring counties. Those in Richland County are the Fire and EMS services and tend to rely on other radio channels or ground channels when operating too far beyond county borders.

Service zone maps have been included in Appendix 6.



4.2 LAW ENFORCEMENT

4.2.1 RICHLAND COUNTY SHERIFF'S DEPARTMENT

The Richland County Sheriff's department provides law enforcement services to all unincorporated areas of the county. The department is dispatched by the county PSAP and operates mainly on the Law repeater channel. The officers develop an understanding of when to switch between the various sites. The department has vehicle repeaters available that interface to Kenwood radio equipment for mobile operation. Motorola XTS2500 & 5000 models make up most of the portable radio equipment models.

4.2.2 RICHLAND CENTER POLICE DEPARTMENT

The City of Richland Center Police Department provides law enforcement services to the community. The department is dispatched for 911 calls by the County PSAP as well as taking calls for service during business hours from the department's office. The department has a dedicated radio repeater system available for operations that is located at the department building using a rooftop antenna. This repeater is capable of operating on Motorola DMR architecture, but currently the department has a variety of Kenwood and Motorola subscriber equipment. Mobile APX and XTL models do not support DMR schemes and as well the portable XPR models are supplemented with some Kenwood models.

4.2.3 CITY OF VIOLA POLICE DEPARTMENT

The Viola Police Department provides law enforcement services to the Village of Viola incorporated areas. The department is dispatched by the County PSAP and operates on the Law repeater channel from the Sylvan Site for communications. The department uses Motorola radio equipment for mobile and portable operations that are considered mostly previous platform models. The Department identified a vehicular repeater system in operation as well.

4.3 FIRE AND RESCUE

4.3.1 BLUE RIVER FIRE & RESCUE

Blue River Fire & Rescue is a department located outside the boundaries of Richland County just across southwest border in Grant County. The Department provides fire, and rescue services to the Richwood township area and points east. The department is dispatched by the County PSAP and operates on the Fire repeater channel with coverage coming likely from the USCC Site. With mostly Motorola listed equipment the department operates XTS & XTL model units considered previous lines. Some Kenwood mobiles were identified as well. Paging equipment was identified as Motorola Minitor VI model units.

4.3.2 CAZENOVIA FIRE DEPARTMENT

Cazenovia Fire Department is in the Village of Cazenovia in the northeast corner of Richland County and across into Sauk County. The Department provides services in the northeast region of Richland County.

4.3.3 LA FARGE FIRE DEPARTMENT

The La Farge Fire Department is located in Vernon County with agency service boundaries into the northwest Richland County boundary. It operates voice communications to the PSAP from the Sylvan site Fire channel repeater. The department identified the use of mostly Kenwood radio equipment and some lcom portables. Paging subscriber units were listed as Motorola Minitor V & VI models with stored voice.

4.3.4 LONE ROCK FIRE DEPARTMENT

Lone Rock Fire Department is in the Village of Lone Rock in the southeast corner of Richland County and across into Sauk County. The Department provides services in the southeast region of Richland County.

4.3.5 MUSCODA FIRE DEPARTMENT

Muscoda Fire Department is in the Village of Muscoda located across in Sauk and Grant Counties. The Department provides services in the south central region of Richland County.

4.3.6 RICHLAND CENTER FIRE DEPARTMENT

Richland Center Fire Department provided Richland County a major amount of district coverage stretching across the middle of the County, border to border. The Department is dispatched by the County PSAP on calls for service and would operates from the USCC site on the Fire repeater channel. Listing all Motorola vendor equipment, the department has a combination of older and current model units. Having some Motorola APX versions that a current production and would support P25 features. Paging subscribers were identified as Motorola Minitor V & VI model equipment.

4.3.7 VIOLA FIRE DEPARTMENT

The Village of Viola Fire Department provides fire district coverage in the northwest corner of the County. Dispatched by the County PSAP it would rely on coverage from the Sylvan Fire repeater channel. The community straddles the county border with neighboring Vernon County. The department has a combination of portable and model radios from vendors Motorola, Kenwood, and Icom. The department uses Motorola (Minitor V) and Unication (G1) model paging subscribers.

4.3.8 YUBA FIRE DEPARTMENT

Yuba Fire Department provides fire district services to the community and the northern central part of Richland County. Dispatched by the County PSAP and using the Fire repeater, coverage would likely come from the Bunker Hill Site. The department listed operating Motorola mobile radio equipment and Minitor V model paging devices.

4.4 AMBULANCE SERVICES

4.4.1 BLUE RIVER EMS

Listed as a service provider covering the southwest corner of the County this group is combined with the Fire Department.

4.4.2 BOAZ FIRE RESPONDERS

TBD

4.4.3 CAZENOVIA EMS

Listed as a service provider covering the northeast corner of the County this group is combined with the Fire Department.

4.4.4 ITHACA MEDICAL FIRST RESPONDERS

The department operates a single mobile and Icom portable radios and listed Motorola Minitor VI pager models.

4.4.5 LA FARGE EMS

Listed as a service provider covering some small areas in the northwest corner of the County this group is combined with the Fire Department.

4.4.6 LONE ROCK EMS

Listed as a service provider covering the southeast corner of the County this group is combined with the Fire Department.

4.4.7 MUSCODA EMS

Listed as a service provider covering the south central part of the County this group is combined with the Fire Department.

4.4.8 RICHLAND COUNTY EMS

The Community Ambulance Services is dispatched by the County PSAP and operates on the Preston Fire repeater channel. The department operates Kenwood mobile radio equipment with Kenwood portable radios as well. Paging equipment was identified as Motorola Minitor V model units.

4.4.9 VIOLA EMS

The department operates previous model Motorola mobile and Icom portable radios and listed no pager models.

4.4.10 YUBA FIRST RESPONDERS

Listed as a service provider with no distinguished coverage area this group is combined with the Fire Department.

4.5 EMERGENCY MANAGEMENT AGENCY (EMA)

Richland County operates an independent Emergency Management Agency (EMA) providing services to the County. The agency identified approximately eight spare radio units in reserve within the county. However, the agency does not have a cache of spare radios that could be provided for use during a major incident.

4.6 HIGHWAY DEPARTMENT

Richland County operates the Highway Department on an independent radio system providing services to the agency with a single site repeater unit. Operated in the VHF frequency band the unit is located on the WRCO tower site. Similar to many public works agencies the department relies heavily on Kenwood model TK-7360 mobile radio units. Kenwood model TK-2160 portable radios were also listed.



4.7 OTHER

4.7.1 RICHLAND COUNTY JAIL

A separate radio system was identified for use in Richland County jail operations operated in the UHF frequency band.

4.7.2 AIR AMBULANCE

TBD

4.7.3 HAZMAT

TBD

4.7.4 RACES/ARES

Richland County has recently identified support from an amateur radio group and the implementation of equipment at the Courthouse building.



5 FCC LICENSING

5.1 OVERVIEW

FCC licensing for the operational frequencies needed to construct a radio system are the key ingredient of any design. TNCG identified multiple public safety agency FCC licenses in the County belonging to various agencies and performed a complete review of the detail.

FCC licensing on the key system channels are well grouped on two key licenses (WQPM421 & KSC277), and both share the same FRN ownership. Renewal timelines are fast approaching on most of the licensing, starting as early as the fall of 2021 and going through 2023. Updates of these licenses likely took place last around narrowbanding mandate processes.

Some licensing was found with simple construction deadlines needing to be updated. These simple housekeeping issues could be addressed with online modifications done by the County.



Drill To Type Call Sign Status Se		Radio Service	License Name	Market Code	Sub Market	Channel Block		
<u>Detail</u>	G	WPJS680	А	PW	RICHLAND CENTER, CITY OF			
<u>Detail</u>	G	WNYU878	А	PW	RICHLAND, COUNTY OF			
Detail	G	WNPS436	A	PW	RICHLAND CENTER, CITY OF			
Detail	G	KB83045	A	PW	RICHLAND CENTER, CITY OF			
Detail	G	KSC277	A	PW	RICHLAND, COUNTY OF			
Detail	С	KRY532	A	IG	RICHLAND GRANT TELEPHONE COOPERATIVE INC			
Detail	с	WGV570	А	IG	RICHLAND ELECTRIC COOPERATIVE			
<u>Detail</u>	с	WNAE298	A	IG	RICHLAND CENTER REDI MIX			
Detail	с	WQDF508	A	PW	RICHLAND HOSPITAL INC			
Detail	с	WQEI285	A	IG	RICHLAND HOSPITAL INC			
Detail	G	WQKM619	A	PW	RICHLAND CENTER, CITY OF			
Detail	G	WQKM620	A	PW	RICHLAND CENTER, CITY OF			
Detail	G	WQPM421	A	PW	RICHLAND, COUNTY OF			
Detail	G	WRCJ251	А	IG	RICHLAND SCHOOL DISTRICT			



5.2 FREQUENCY CHART

The following chart identifies the licensed frequencies being operated in Richland County and appearing on the FCC licenses.

FREQUENCY	CHAN NAME	CALL SIGN	FRN #	LOC #	ANT#	STATION	EMISSION	SITE NAME	NOTES	
								Arres of Operation 40.0 km		-
151.2275		KSC277	,0002682763	6	1	MU	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		–
151.2275	a) - 111 m/	KSC277	,0002682763	6	1	MU3	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		
154.7400	Sheriff IX	KSC277	,0002682763	1	1	FBZ	11K2F3E - 8K10F1D - 8K10F1E	Idwer Hill USCC		⊢
154.7400	Sheriff IX	KSC277	,0002682763	2	1	F82	11K2F3E - 8K10F1D - 8K10F1E	Sylvan Site		–
154.7400	Sheriff TX	KSC277	,0002682763	6	1	MO	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		
154.7400	Sheriff TX	KSC277	,0002682763	7	1	FB2	11K2F3E - 8K10F1D - 8K10F1E	Eagle Tower Site		
155.0550	Fire TX	KSC277	,0002682763	1	1	FB2	11K2F3E - 8K10F1D - 8K10F1E	Tower Hill USCC		<u> </u>
155.0550	Fire TX	KSC277	,0002682763	3	1	FB2	11K2F3E - 8K10F1D - 8K10F1E	Bunker Hill Site		
155.0550	Fire TX	KSC277	,0002682763	4	1	FBC	11K2F3E - 8K10F1D - 8K10F1E	Cazenovia Fire		_
155.0550	Fire TX	KSC277	,0002682763	6	1	MO	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		⊢_
155.3700	Point to Point TX/RX	KSC277	,0002682763	1	1	FB	11K2F3E - 8K10F1D - 8K10F1E	Tower Hill USCC		⊢
155.3700	Point to Point TX/RX	KSC277	,0002682763	6	1	MO	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		⊢
155.4750	VLAW31	KSC277	,0002682763	6	1	MO	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		⊢_
155.9700	Richland PD RX	KSC277	,0002682763	5	1	FX1	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 6.1 Meter Rule		⊢
155.9700	Richland PD RX	KSC277	,0002682763	6	1	мо	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		⊢
158.7525		KSC277	,0002682763	9	1	мо	11K2F3E	Area of Operation - Richland County		1
158.8950	Fire RX	KSC277	.0002682763	5	1	FX1	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 6.1 Meter Rule		
158.8950	Fire RX	KSC277	.0002682763	6	1	мо	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km		
158.9250	Sheriff RX	KSC277	.0002682763	5	1	FX1	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 6.1 Meter Rule		
158,9250	Sheriff RX	KSC277	.0002682763	6	1	мо	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km around #1		
173 2625	VRS	KSC277	0002682763	6		мо	11K2F3E - 8K10F1E	Area of Operation 40.0 km around #1		
173,2625	VRS	KSC277	.0002682763	6		моз	11K2F3E - 8K10F1E	Area of Operation 40.0 km around #1		
453.9625	UHF	KSC277	.0002682763	6	1	мо	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km around #1		
453.9625	UHF	KSC277	.0002682763	6		мо	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km around #1		
460.2000	Jail	KSC277	.0002682763	6		мо	11K2F3E - 8K10F1D - 8K10F1E	Area of Operation 40.0 km around #1		
460.2000	UHF	KSC277	.0002682763	8	1	FB	11K2F3E - 8K10F1D - 8K10F1E	Dispatch Center Site		
151.1300	Highway TX	WNYU878	.0006632244	1	1	FB2	11K2F3E	Tower Hill USCC		
151.1300	Highway TX	WNYU878	,0006632244	3	1	мо	11K2F3E	Area of Operation 6.1 Meter Rule		
159.0150	Highway RX	WNYU878	.0006632244	2	1	FX1	11K2F3E	Area of Operation 40.0 km around #1		
159.0150	Highway RX	WNYU878	.0006632244	3	1	мо	11K2F3E	Area of Operation 40.0 km around #1		
154.2950		WPJS680	.0002684496	1	1	FB	11K0F3E	Richland Center Fire Station		
154,2950		WPJS680	.0002684496	2	1	мо	11K0F3E	Area of Operation 32.0 km around #1		
154.4300	RC Fire Ground	WPJS680	.0002684496	1	1	FB	11K0F3E	RC Fire Station		
154,4300	RC Fire Ground	WPJS680	.0002684496	2	1	мо	11K0F3E	Area of Operation 32.0 km		
154.3550	Paging	WOPM421	.0002682763	1	1	FB2	11K2F3E	WRCO Site		
151.2800	Marc TX	WOPM421	.0002682763	1	1	FB2	11K2F3E	WRCO Site		
156.1575	Paging RX	WOPM421	.0002682763	2	1	мо	11K2F3E	Area of Operation 40.0 km around #1		
154,3550	Paging TX	WOPM421	.0002682763	2	1	мо	11K2F3E	Area of Operation 40.0 km around #1		
156 1575	Paging RX	WOPM421	0002682763	3	1	FX1	11K2F3E	Area of Operation 6.1 Meter Rule		
153,8450	Marc RX	WQPM421	.0002682763	3	1	FX1	11K2F3E	Area of Operation 6.1 Meter Rule		
154,3550	Paging	WOPM421	.0002682763	4	1	FB	11K2F3E	Dispatch Center Site		
151,2800	Marc TX	WOPM421	.0002682763	4	1	FB	11K2F3E	Dispatch Center Site		
154,7400	Sheriff TX	KB83045	.0004796306	1	1	мо	11K2F3E	Area of Operation 16.0 KM around #2		
154,9460	RCPD TX	KBR2045	0004796306	1	1	мо	11K2F3E	Area of Operation 16.0 KM around #2		
155 2700	Point to Point TX/RX	KB82045	,0004796306	1	1	мо	11K2F3E	Area of Operation 16.0 KM around #2		
155.5700	VLAW31	K083045	,0004796306	1	1	мо	11K2F3E	Area of Operation 16.0 KM around #2		
155,4750	RCPD RX	K083045	,0004790300			мо	11K2F3E	Area of Operation 16.0 KM around #2		
155.9700	RCPD TX	KB63045	,0004796306	1		FB	11K2F3E	Dispatch Center Site		
154.6450	RCPD TX	KD03045	,0004795305	2	1	FB	11K2F3E	Richland Center Police Station		
104.6450	VLAW31	KD03045	,0004795305	3	1	FB	11K2F3E	Richland Center Police Station		
155.4750	RCPD TX	KB83045	,0004796306	3	1	FB2	11K2F3E	Richland Center Police Station		
154.8450	RCPD RX	кв83045	,0004796306	3	1	EX1	11K2F3F	Richland Center Police Station		\vdash
155.9700	VMFD28	кв83045	,0004796306	3	1	FR	11K2F3F	WRCO Site		
155.3400	****.220	WQDF508	,0013675228	1	*		Linéfol	whice site		<u> </u>
										⊢
										-
					1					1

5.3 SITE CHART

The following chart identifies the licensed locations for operating various frequencies listed on FCC licenses in Richland County.

				X		
Call Sign	SITE NAME	Location	Transmitter Address /Area of Operation	City	NOTES	
KSC277	Tower Hill - USCC Site	1	200 Tower Hill Road	Richland Center		
KSC277	Sylvan Site	2	HWY E 1.6KME	Sylvan		
KSC277	Bunker Hill Site	3	30638 HWY I Bunker Hill	Cazenovia		
KSC277	Cazenovia Site	4	N Main Street	Cazenovia		
KSC277	6.1 Meter Rule WI	5	Area of Operation			
KSC277	40.0 KM radius around location #1	6	Area of Operation			
KSC277	Eagle Tower Site	7	36 Hipenbecker Road	Muscoda	Grant County	
KSC277	Dispatch Center Site	8	181 W. Seminary Street	Richland Center		
KSC277	Countywide Richland WI	9	Area of Operation			
KB83045	16.0 KM radius around location #2	1	Area of Operation			
KB83045	Dispatch Center Site	2	181 W. Seminary Street	Richland Center		
KB83045	Richland Center Police Station	3	470 S. Main Street	Richland Center		
WNYU878	Tower Hill Site	1	Roosevelt Drive on Adj Hill	Richland Center		
WNYU878	6.1 Meter Rule WI	2	Area of Operation			
WNYU878	40.0 KM radius around location #1	3	Area of Operation			
WPJS680	Richland Center Fire Station	1	205 East Mill Street	Richland Center		
WPJS680	32.0 KM radius around location #1	2	Area of Operation			
WPQM421	WRCO Site	1	Hillview Drive between Premo Rd & County, 2.4 MI SW of	Richland Center		
WPQM421	40.0 KM radius around location #1	2	Area of Operation			
WPQM421	6.1 Meter Rule WI	3	Area of Operation			
WPQM421	Dispatch Center Site	4	181 W. Seminary Street	Richland Center		
WQDF508	WRCO Site	1	Hillview Drive between Premo Rd & County, 2.4 MI SW of	Richland Center		

6 EXISTING SYSTEM INFRASTRUCTURE DESIGNS

6.1 VOICE SYSTEMS

Voice radio channels in Richland County operate as standalone site repeaters or base stations providing a level of coverage based on their individual antenna designs. As standalone systems they also heavily rely on the subscriber terminal equipment to create the coverage footprint. Operating from five (5) identified tower (site) locations these repeaters provide coverage based on the re-used frequencies they operate, and the unique squelch code used to activate each specific repeater station. This is true for the Law and Fire system channels.



Based on the County's FCC licensing and station equipment models, the operational power of most stations is likely 50-100 watts output. Each coverage pattern provided by the various sites is likely greatly support by the station antenna height, terrain, and location. For the base stations in the system design every communication is a radio-to-radio call to each unit.

Repeater operation by design performs the improvement of expanding a radio-to-radio conversation using the power and antenna system to increase the coverage footprint of the subscriber terminal. Repeater design systems place the limiting factor in communicating on the subscriber's device transmit signal reaching the repeater clearly. Repeating a clearly received signal from a tower site then enhances other subscriber terminals ability to receive.

However, when reusing frequencies on multiple sites without a simulcast implementation the system greatly increases the possibility of creating interference. As radio communications is PTT (one way at a time, talk or listen) the subscriber user does not know the level of clarity in their communications without feedback from the other system users or dispatch. The design allows for system users of different locations to create simultaneous calls. As dispatch can hear multiple repeaters operating on the same channel two or more of these repeaters active at the same time can prevent dispatch from effectively monitoring field unit traffic.

Where the real complexity occurs is when there are numerous incidents occurring simultaneously - dispatch also needs to be become a communications traffic cop. Dispatchers must switch between multiple repeaters as they communicate with each public safety officer.

This multiple repeater design also shifts the responsibility of understanding coverage capabilities and best performance to the subscriber user who must know where they are and which repeater to connect with.

CHAN NAME	CHAN NAME SITE		ТХ	RX	ERP	Ant/TP
			154.740			
SHERIFF - SYLVAN	Sylvan Site	Harris - Master III	(118.8)	158.925 (169.9)	220	131
SHERIFF - RICHLAND	Tower Hill - USCC Site		154.740			
		Harris - Master III	(118.8)	158.925 (146.2)	180	282
SHERIFF - EAGLE	Eagle Tower Site	Motorola - MTR2000	154.740	158 025 (110 0)	250	157
			(118.8)	158.925 (110.9)	350	157
SHERIFF - LONE ROCK	Lone Rock Site	Motorola - Quantar	(118.8)	158.925 (91.5)	None	None
			154.740			
SHERIFF - BUNKER	Bunker Hill Site	Motorola - Quantar	(118.8)	158.925 (311)	None	None
SHERIFF - ITHACA	Not Constructed					
	Tower Hill - USCC Site	Harris - Master III	155.370	155 270 (050)		
FOINT TO FOINT	Tower This - 05CC Site		(146.2)	155.570 (CSQ)	180	282
RICHLAND PAGE	Tower Hill - USCC Site	Harris - Master III	154.355 (131)	154.355 (131)	224	292
LONE ROCK PAGE	Lone Rock Site	Motorola - Quantar	154.355 (131)	158.925 (411)	None	None
RICHLAND FIRE						
			155.055	150 005 (110 0)		
FIRE - RICHLAND		Harris - Master III	(118.8)	138.895 (118.8)	180	282
FIRE - BUNKER	Bunker Hill Site	Motorola - MTR2000	155.055	158.895 (?)	400	140
			(118.8)		180	148
FIRE - SYLVAN	Sulvan Site	Motorola - MTR2000	(118.8)	158.895 (151.4)	None	None
	Lore Deels Cite	Kerward TKD 750		150.005	None	None
FIRE - LOINE ROCK	Lone Rock Site	Kenwood - TKR-750	155.055	158.895	None	None
FIRE - ITHACA	Not Constructed					
HIGHWAY	W/RCO Site	Motorola - MTR2000	151.130	159 015 (127 3)		
			(162.2)	155.015 (127.5)	119	282
RCPD	Richland Police Station	Motorola - MTR3000	154.845	155.97	45	27
IFERN Tower Hill - USCC Sit		Harris - Master III	154.265	154.265 (210.7)	None	
			(210.7)	. ,	······	None
MARC	WRCO Site	Harris - Master III	151.280	153.845 (136.5)	11/ 2	202
			155 340		114.3	232
VMED28	WRCO Site	Harris - Master III	(118.8)	155.340 (118.8)	89	296



6.2 SYSTEM OVERSIGHT

Most current oversight duties of the radio system belong to the Richland County Sheriff and support and funding come from the Public Safety committee. Issues experienced while using the systems would normally be passed onto the dispatch services or department administration to be addressed.

7 EXISTING RADIO SYSTEM INFRASTRUCTURE EQUIPMENT

7.1 REPEATER AND BASE STATION EQUIPMENT

The County operates most of the radio repeater and base station equipment in the current design using numerous vendor's model equipment. Site equipment was found as a mix of Motorola and Harris device, while control station equipment tended to be Kenwood. All models reviewed would be considered not to be currently available in vendor product lines and likely end of life supported by the manufacturers.

Equipment implementation was not found to follow any defined design and no configurations seem to be similar. Equipment configurations and installation characteristics take on the project scope, site availability,



and technicians support at the time of construction.

Both Motorola Quantar and MTR2000 stations were found in operation at various sites. Both station equipment are a solid-state design PC programmable platform capable of multiple frequency operation. The main difference between the Quantar series and MTR series other than age of product is a more robust platform was supported in the Quantar series. The Harris Master III model stations were also found used in many of the sites and would match the era and characteristics of the Motorola equipment.



All models are modular designed for rack mount configuration implementation and are capable of analog only operation as they do not support P25 formats. These stations support automatic battery backup and cutover systems to ensure operation during AC power failure. Equipment to rack grounding support was support and outlet and some isolation bar AC power implementations.



7.2 CONTROL STATIONS

Control station operation is key in Richland for supporting the PSAP dispatch radio consoles and independent Kenwood mobile radios provide the bulk of support for operating on the various channels. These radio models were supported with an independent 12-volt DC power supply, dedicated antenna, and a CPI remote adapter device for console interfacing. The TIP216 model CPI remote adapter gives multi-channel control of the radio unit to the console system.



7.3 BACKHAUL

Given the standalone repeater system design used in Richland County the need for backhaul system support is limited to the PSAP console connections needed. The Motorola Centracom consoles support only older wireline control operation and not a digital solution. Wireline needs breakup into the control of radio equipment at the PSAP building and station equipment located in Richland Center at the Tower Hill sites.



The support of the radio stations at the PSAP building is done using premise telco cables from the basement equipment room where the console system backroom electronics are located to the penthouse location of radio equipment. Cabling needs for most radio equipment will be either a single or double pair of standard twisted wire telco cabling. Control functions are likely sent to the radio equipment using tone signals and voice audio also resides on the lines.

This same functionality occurs on telco cabling leaving the Centracom console backroom electronics that is routed to the station equipment off site. Done using 2 or 4 wire circuits leases from telephone vendors these control backhauls are not done over standard

telephone lines. Circuits referred to as dry pairs are provided that remove normal telephone line parameters and give a clean pair of cabling to be used, which sometimes does need to be amplified based on distances to any tower location.





7.4 COMBINING/MULTICOUPLING

Combining both transmit and receive station operation on a single antenna system plays an intricate role in system design in Richland County as repeaters are the main communication devices. Transmit and receive frequency separation can dictate the level of support the antenna duplexer must provide to assure that the simultaneous transmission is not desensitizing the receiver's ability to clearly hear the conversation. The VHF frequency band carries the challenge of obtaining quality operating frequencies as it was not designed to provide for this requirement.

Most site repeater duplexers identified provided a simple rejection only support of the opposite operating frequencies found in the repeater. Various products were used and likely provide a varying degree of performance to each system.

As well some separation cavity support was found to help isolate antenna broadcast



interference when frequencies were operating that had limited physical separation. Given the physic characteristics of the VHF frequency range these larger cavity devices are the typical needed size at most sites not having proper frequency separation.



true

7.5 SITES

Current public safety radio systems operate in Richland County with repeater and base station equipment at eight (8) various antenna site locations dispersed throughout the county to support radio coverage needs. Three (3) other sites are designated on FCC licensing and provide additional equipment location support. Primarily the County's public safety system is supported from leased tower structures and a local water tank.

Site Name	Туре	Height	ASR#	Address	Latitude	Longitude
Bunker Hill Site	Guyed Tower	150"		30638 HWYI Bunker Hill	43-29-33.9 N	90-15-34.5 W
Cazenovia Site	Rooftop	10'		N Main Street	43-31-21.9 N	91-11-31.5 W
Dispatch Center Site	Rooftop	50"		181 W Seminary Street	43-20-2.63 N	90-23-10.78 W
Eagle Tower Site	SelfSupport Tower	245"	1241130	36 Hipenbecker Road	43-09-36.9 N	90-25-47.6 W
Lone Rock Site	Water Tower	110"			43-10-50-41 N	90-11-58.23 W
Richland Center Fire Station	Rooftop	25'		205 East Mill Street	43-20-09.9 N	90-23-01.5 W
Richland Center Police Station	Rooftop	25'		470 S. Main Street	43-19-56.0 N	90-23-13.0 W
Sylvan Site	Guyed Tower	180'		HWY E 1.6 KM E	43-25-27.9 N	90-36-30.5 W
Tower Hill - USCC Site	SelfSupport Tower	320"	1000186	200 Tower Hill Road	43-20-14.9 N	90-22-42.5 W
Tower Hill Site	Guyed Tower	50"		Roosevelt Drive on Adj Hill	43-20-14.9 N	90-22-41.5 W
WRCO Site	Guyed Tower	350"	1257097	Hillview Drive between Premo Rd & County, 2.4 MI SW of	43-18-55.4 N	90-25-35.0 W

Equipment shelters also mostly consisted of shared equipment space with security to the level of the site owner's needs. Antenna heights and locations appear to have been designed around the structure opportunities and capabilities vs. any coverage capability considerations. These sites rely heavily on the owner's maintenance and upkeep support with items such as AC power and surge protection not well monitored.

7.5.1 BUNKER HILL SITE

The Bunker Hill tower site is located at 30638 Highway I just southwest of the town of Cazenovia. This site is found in the Northeast corner of Richland County and the site belongs to Lavalle Telephone Coop . The site consists of a 150' guyed tower structure with a brick shelter building at the base of the tower. This building is owned by the Coop and provides space to the County's radio equipment. A backup generator unit with LP tank support was in place but no security fencing was providing protection the tower or shelter areas.

The site supports the County's Law and Fire channels with two (2) omni-directional dipole antennas mounted near the top of the tower and just below. Each antenna is dedicated to the repeater equipment located in the brick building structure. Cabling is routed directly from the tower leg into the shelter likely on the ice bridge structure, but underground conduits also exist. Antenna ¾" coaxial cable route from the tower and into a dedicated arrestor device, where it changes over to an LMR-400 jumper. That jumper then routes to the repeater duplexer equipment.



Motorola Quantar and MTR2000 equipment were installed into a 7' open equipment rack belonging to the County. Installed next to each of the repeaters was a dedicated antenna duplexer device allowing transmit and receive combining. A smaller Motorola equipment cabinet was located next to the rack and found empty. Minimal simple cabinet grounding was identified as tied into the shelter's main ground bus.





7.5.2 DISPATCH CENTER SITE

Richland County radio equipment operating locally at the PSAP site is supported by antenna systems on various rooftop locations of the courthouse building. The courthouse is located at 181 West Seminary Street in Richland Center and although the structure is a combination of multiple buildings it can be considered as a three-story structure. Radio equipment antennas are mounted using various wall and non-penetrating roof top mounts.

Most console radio equipment is installed in a suspended open equipment rack above and next to the building air handling vent systems. These control station configurations are



supported with dedicated antennas located above in a semi-enclosed outdoor roof space.

Antennas are connected using the smaller LMR400 coaxial cables due to the proximity of the radio equipment and the control station operation. Cables are routed through dedicated lightning arrestor devices.







7.5.3 EAGLE TOWER SITE

Eagle tower is Richland County's only supported radio system site that is not located within the County boundaries. This site reside just south of the community of Muscoda in neighboring Grant County up on the foothills of the Wisconsin river. Its location serves the southern areas of the County being equally centered to support Richland. As a United States Cellular owned site, the antenna coverage is provided by a 245' self-supporting tower structure and is registered with the FCC using ASR # 1241130.



The site consists of multiple shelter buildings in a fenced compound at the base of the tower. Richland County owns the smaller approximate 8'X10' steel building shelter built by Trachte for locating site equipment.

Eagle tower supports only the County's Law channel from this site with a directional dipole antenna mounted at the approximate 150' tower height. A ¾" antenna coaxial cable provides connectivity from the antenna to the shelter via a dedicated ice bridge. Once inside the shelter the coax is run through a lightning arrestor and jumped into the



enclosed Motorola equipment cabinet. A Motorola MTR2000 repeater unit with a dedicated duplexer device and battery backup was found providing operation. Some empty cabinets were also found within the shelter as well as a small generator device.

The site showed signs of a past electrical surge failure having a failed breaker and the radio equipment installed using an extension cord from a distant outlet.



7.5.4 LONE ROCK SITE

The Lone Rock tower site provides radio system coverage from the antenna location on top of the community's water tank. The Lone Rock community is in the very southeastern corner of Richland County where it meets Sauk County. Located on Exchange Street the tank serves to provide other vendor or community antenna support as well, and is



approximately 110' in height.

County radio system equipment at the site is in a single outdoor rated cabinet unit found within the base of the water tank. The cabinet house both the Law and Fire repeater devices serving this area, but also houses a unique Paging channel repeat device. Appearing

to be the only one of this kind in the County's system the Paging channel repeat device reuses the Law receive frequency with a unique squelch code and rebroadcasts on the Paging Channel. This is accomplished still using two site antennas and a shared transmit operation with the Fire channel.

Motorola Quantar repeater stations were identified that support the Law



and Fire channels at the site. Both were equipped with a standard cavity duplexer unit to combine transmit and receive operations. A third Kenwood model station was used to perform the additional page repeat operation. Configuration documents indicated the device gained it's receive antenna by sharing connectivity to the Law repeaters antenna and then through an antenna relay shared it's transmit function with the Fire repeater. This shared antenna arrangement creates an interruption of service for the Fire repeater during paging operation.

Dipole gain antennas on top of the water tank provide the site coverage and are cabled to the back of the equipment cabinet using a 7/8" hard line. At that point they are passed through dedicated arrestor devices and jumpered to the cabinet with 2" coaxial cables.

Cabinet grounding was completed to the tanks main ground bus installed by site users.



7.5.5 SYLVAN SITE

Providing coverage capabilities in the Northwest part of the County is the Sylvan site located just east of the town of Sylvan. The site is listed at Highway E approximately 1.6 KM east on FCC licensing. The site location supports a 180' guyed tower with a small metal shelter at the base of the tower and enclosed by a barbed wire fence compound. This site is a lease/share space from the tower owner Richland-Grant Telephone Cooperative.

Supporting both the Law and Fire repeater coverage are two dipole omni-directional antennas located at the top and near the top of the tower. Connectivity to the antennas are supported by dedicated 7/8" coaxial cable runs via the ice bridge and into the shelter. Coax lightning arrestors were grounded to the building systems directly inside the entry port window, and jumpered to equipment cabinets.

Both Motorola and Harris repeater equipment was found located in dedicated equipment cabinets along with duplexer combining devices. Cabinets were powered from wall outlets



and grounding connections supported bonding to the building system. The site had



numerous signs of rodent damage with nesting signs within the County cabinets including dead carcasses.

true **NORTH**





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7.5.6 TOWER HILL – USCC SITE

Providing Richland County its main coverage and central location site is a United States Cellular tower located in Richland Center on Tower Hill. Space is provided for County equipment with a shared lease arrangement via the site agreement. The self-supporting 320' structure is an FCC registered (ASR #1000186) location and is located on the high bluff at the east side of town. A fenced compound encircles the single shared equipment shelter at the base of the tower and generator backup equipment.



The County shares the common steel building space with a dedicated access and separated room space. Located at the site are the Law and Fire repeater units as well radio equipment for Page, IFERN, and Point to Point equipment. Harris Master III equipment provides the operation for all stations at the site.





7.5.7 TOWER HILL SITE

Tower Hill as always provided County support as a radio equipment antenna site and some support is still used from the previous location on Tower Hill. Located with walking distance of the USCC site is the approximately 75' guyed tower that supports two brick shelters at the base of the tower. The county relies on the tower to complete a small microwave hop from the Dispatch center site as well as a receive location for paging/cellular conversion equipment.

This site does not serve to locate radio communications equipment.





7.5.8 WRCO SITE

Also centrally located in the County and supporting radio coverage near Richland Center is the WRCO Site. Local radio station owns the 350' guyed tower located at Hillview Drive between Premo Road and County. This site is register with the FCC under ASR #1257097.

The site supports a few of Richland County's mutual aid stations and the Highway Department channel from equipment located in the shared shelter space. This 10'X20' wood building shelter is located at the base of the tower and secured with a chain link fence compound. The shelter is also supported with backup power generation using the LP fuel storage tank on-site.

Antennas located near the top of the tower provide dedicated support to the Motorola (Highway) repeater and Harris (Marc 1) station. Dedicated cabinets are used to house the County's radio equipment and any needed combiner systems. Antenna connectivity if via 7/8" coaxial hardline run to each dipole antenna.



8 EXISTING DISPATCH SYSTEMS EQUIPMENT

8.1 LOCATION

Richland County emergency services are dispatched from the counties only 911 PSAP operating at the Sheriff's office in Richland Center. The center is operated in a designed space within the jail on the 2nd floor of the building. Serving as both the 911 PSAP and Jail Operations this approximate 15' X 15' room is located off the main lobby area and accessed through the secured jail entrance. The current space provides for two dispatch console furniture positions facing the walls in a back-to-back configuration. Design of the room provides full view windows on all sides except for one wall having a lower-level hallway equipment space in the room. Windows expose the center to the jail and lobby area which allows access control.

Uniquely, the center configuration allows jail and dispatch operations to mix and match during a personnel shift. This also applies to staffing of console positions always keeping at least one position in operation.


8.2 DISPATCH CONSOLES

The center operates a two-position computer-based radio dispatch console system made by Motorola Solutions. This Centracom Gold Elite model system is design with three main system components needed to have a functional console system. Each position operates a dedicated computer client machine that is connected to the position audio interface panel providing receive speakers and a gooseneck microphone device. This unit also serves to interface footswitch, headset, and performs other position functions as needed.

The console system backroom electronics consist of a server computer communicating with the console PC for configuration and setup. These networks were designed and supported through various Windows generations, but final variations ended with the Windows 7 platform. The IP system operation provides for command-and-control functions while audio routing is via a dedicated proprietary cable between the electronics rack and audio panel.

The electronics rack provides the radio equipment interface capabilities with dedicated rack cards to perform individual functions in the system such as console interface, radio control, aux I/O and others.



TBD

8.3 CONSOLE RADIO EQUIPMENT

The Richland County dispatch console systems are supported with radio base and control station equipment located on-site and radio equipment located at the Tower Hill - USCC site. Equipment on-site is housed on a rack system in the building penthouse and provides operation through standard mobile radio units interface with wireline controller modules.

Console connectivity is supported by the dedicated premises cable between the equipment room on the lower floor and the penthouse equipment location. Standard two and four wire telephone pairs are required for operation.

8.4 LOGGING 8.5 FIRE STATION ALERTING

No Fire Station alerting systems were identified in use by Richland County agencies at the time of this report.

8.6 SIREN ACTIVATION

No standalone Civil Defense Siren (CDS) systems were identified for control operations. County siren activation systems were found to use the radio dispatch console systems to encode a two-tone or DTMF signaling on the main paging channel for activation.

8.7 POWER

8.7.1 PRIMARY

Main electrical power for the dispatch center and radio equipment room is provided via common building power load centers.

8.7.2 GENERATOR

Backup power is provided to the dispatch center via a common generator system which supports the building location. It does not appear to be exercised under load on a regular basis.

8.7.3 UPS

Dedicated uninterrupted power sources (UPS) units were identified providing backup power to critical console system and dispatch equipment support. Power systems seemed adequately sized to provide backup power momentarily until the generator can come online.





8.8 HVAC

All air handling needs for the dispatch center and associated radio equipment room are primarily provided by the building main HVAC systems. No supplemental systems or plugin fan units were identified in the radio equipment room. Heat generation or temperature change was not identified as extreme in either the dispatch or equipment room.

8.9 GROUNDING

Grounding systems in the dispatch center and associated radio equipment room were found to be in place to the level expected when current systems were installed. These systems were identified as minimal grounding systems by today's standards usually connecting a ground bar to a cabinet or equipment chassis. Systems were not identified to be complete and covering all equipment and systems installed on site.

Verification of a single point ground network could not be done, and no perimeter ground systems were identified as to what would be considered common designs used today.



9 FIELD TERMINAL SUMMARY

Surveys performed by TNCG identified the County stakeholders operating various manufacturers' brands, design tiers, and age of radio equipment throughout the County. A representation of single band VHF operational models with analog and P25 digital capabilities was provided.

The purchase, maintenance, and operational responsibility of field terminals go directly to the department using the equipment in Richland County. With multiple vendors comes the challenges of programming and setup configuration of radio units to a common standard as defined by the National Interoperability Field Operational Guide (NIFOG).

Paging equipment (pagers) identified in use by Fire and EMS agencies were found to be mostly Motorola style tone and voice units either Minitor V or VI models.

Much of the equipment identified could be categorized as low tier public safety or business tier products, and age varies. Replacement and expansion are being done by departments on an asneeded basis and without specified goals, done possibly based on pricing-only considerations.

9.1 KEY POINTS OF CONSIDERATION

- Equipment used mostly does not meet current public safety standards.
- Lack of standardization for purchases of new units misses opportunities to maximize investments toward improved standards.
- Lack of configurations and programming reliance creates potential issues and obstacles.
- Equipment accountability and tracking helps during high demand for resources.
- Equipment maintenance standards promotes confidence in operational success.
- Common County frequency chart to guide users is helpful.
- Backup or emergency resource equipment helps to fill in gaps and ensure reliability in times of need.

9.2 SUBSCRIBER INVENTORY SUMMARY

Richland County public safety agencies operating on the dedicated County radio systems use approximately 550 various devices. Devices are categorized into three main descriptions for inventory purposes. Portable units represent handheld radios that are operated on rechargeable battery power and provide a small whip antenna system. Mobile units represent vehicle-mounted radios that provide the user with greater transmit power capabilities and an improved vehicle antenna. Finally, control station units represent radios (usually mobile radios) that are in buildings and have outdoor antennas providing even stronger antenna systems.

Subscriber Agency	Agency Type	Portable Unit	Mobile Unit	Control Station	Pager	Radio Type	County	Dispatch Via
Richland Police Department	Law	17	3	1	0	VHF	Richland County	Richland County
Richland County Sheriff's Department	Law	21	19	0	0	VHF/P25	Richland County	Richland County
Viola Police Department	Law	4	1	1	1	VHF/P25	Richland County	Richland County
Blue River Fire & Rescue	Fire/EMS	12	6	1	36	VHF	Richland County	Richland County
La Farge Fire Department	Fire	25	10	1	40	VHF/P25	Richland County	Richland County
Richland Center Fire Department	Fire	39	31	1	88	VHF/P25	Richland County	Richland County
Viola Fire Department	Fire	20	9	1	42	VHF/P25	Richland County	Richland County
Yuba Fire Department	Fire	0	12	0	17	VHF	Richland County	Richland County
Ithaca Medical First Responders	EMS	9	1	0	9	VHF	Richland County	Richland County
Richland County Ambulance Service	EMS	31	7	0	24	VHF/P25	Richland County	Richland County
Viola EMS	EMS	2	2	0	0	VHF	Richland County	Richland County
Lone Rock Rescue	EMS	3	2	0	14	VHF/P25	Richland County	Richland County
		-						
Richland County EMA	EMA	5	2	1	1	VHF/P25	Richland County	Richland County
		-					Richland County	Richland County
Richland County Highway	DPW	15	48	4	0	VHF	Richland County	Richland County
	TOTALS	203	153	11			Total Radios	367
							Total Pagers	272
			1					

10 USAGE / CAPACITY

Public safety radio communications in Richland County rely on the main system channels of Law and Fire on calls for service. Channel activity on these two dedicated channels was found to be minimal and provided the users a location for operations along with dispatching services. Relief of paging dispatch on the Fire channel with the additional dedicated Page channel assisted as well. Minimal simplex (radio to radio) channels were also defined and provided support of operations but lacked any heavy reliance of use or common setup.

The County's system repeater design provides confusion with multiple radio channels to communicate on by the subscriber user, but with the shared frequency resource. Without this complete understanding of the shared design possible system created challenges could disrupt conversations. These repeaters should not be operated at the same time and must be considered localized identical devices and not independent.

Currently the County is missing additional system resources for peak calls for service that allow Dispatch and users capacity to operate effectively and ensure clear communications.

10.1 UTILIZATION OF CHANNELS TODAY

TBD

10.2 NEIGHBORING COUNTIES

Richland County shares borders with five neighbor Wisconsin counties and service boundary areas from County agencies stretch to these neighbors. As well some agencies outside of the County are found providing services within the County borders. Outside the county borders can also be found local hospitals serving the needs of supporting emergency services and requiring agency transport to those locations.

A goal of providing seamless interoperability communications of emergency response agencies when working with other agencies is stressed more and more each day. These capabilities need to provide the end user the greatest level of simplicity and capabilities.

Creating interoperability between neighboring counties will require an understanding of the coverage areas needed and identifying how incident operations might unfold.

				Frequency
Organization	Neighbor	Agency	Radio Band	Information
Richland County	Sauk County WI	Sheriff	VHF	155.700 (82.5)
		Fire	VHF	151.250 (97.4)
		Paging	VHF	155.775 (82.5)
Richland County	Vernon County WI	Sheriff	VHF	154.995 (167.9)
		Fire	VHF	154.860 (136.5)
		Paging	VHF	154.175 (167.9)
Richland County	Crawford County WI	Sheriff	VHF	155.685 (152)
		Fire	VHF	154.310 (151.4)
		EMS	VHF	155.655 (151.4)
Richland County	Grant County WI	Sheriff	VHF	155.865 (123.0)
		Fire	VHF	155.745 (91.5)
		Paging	VHF	155.925 (CSQ)
Richland County	Iowa County WI	Sheriff	VHF	155.7225 (BOC NAC)
		Fire/Paging	VHF	154.385 (77.0)
Richland County	State of Wisconsin	State Patrol	WISCOM	VHF Trunked

10.3 STATE OF WISCONSIN (WISCOM)

The Wisconsin Interoperable System for Communications (WISCOM) is a shared radio system first responders in communities across the state of Wisconsin can use to communicate during a major disaster or large-scale incident. WISCOM is designed as a VHF trunked P25 Phase 1 radio network supporting up to four (4) simultaneous conversation paths during an incident. The system is built using EF Johnson radio infrastructure and is designed to provide 95/95 mobile radio coverage on the State's backbone network but has been enhanced by a few counties to meet portable radio coverage needs in their communities.

The WISCOM system is open for use to any agency for use by County subscribers having a VHF P25 capable trunked radio. Its design dedicates talkgroups for communications with state agencies and regional talkgroups dedicated to mutual aid operations Richland County falls into the classification of the southwest region of interoperability on the WISCOM system. As well the system provides a dedicated travel talkgroup for users to keep in contact with their PSAP throughout the state. The finally the design provides dedicated Richland County talkgroups to the County for SCAN and COMMON operations.

The County is supported for coverage on the WISCOM system by tower sites in the neighboring counties as data lists no repeater sites in Richland County.

The WISCOM system and anticipated system changes needs to be a part of planning processes in any Richland County replacement systems. The key decision of frequency band operation would be the most impactful to interoperability with State agencies. With any change to the system there are work arounds that can be used to provide communication solutions that can be implemented.

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11 FINDINGS

11.1 INTERVIEWS

In the process to develop a thorough understanding of the Richland County public safety radio system and subscriber operations TNCG visited the county, conducted telephone discussion, and sent out survey requests. Additional investigation helped piece together unknown details and information not readily available. Discussions with representatives from various agencies, radio maintenance personnel, and support staff identified the following findings to be understood with the current systems in place:

GENERAL

- Oversight and funding of the Richland County radio systems is provided by the Sherriff's Department and overseen by the Board of Supervisors Public Safety Committee.
- The current system is a collection of solving identified needs using radio vendor input and site opportunities. The system has expanded over time to provide greater capabilities and increased coverage support. Equipment replacement and design modifications would be considered done on an as needed basis.

E-911 DISPATCH

- PSAP is located at 181 West Seminary, Richland Center WI 53581 inside courthouse building.
- > Building constructed as a combination of buildings. New addition in 1985
- Dispatch located beyond public entry area on 2nd floor to Sheriff's department with reception window.
- Room size approximately 15' X 15'
 - Two (2) dispatch furniture positions
- Hot seat Dispatch position #1
- > Headsets for 911 phones, but not integrated into radio
- Deputy contacts dispatch on channel they feel works best in area they are working
- CAD system is Zuecher model.
- Paging test performed twice a day. Evening Fire, Morning EMS
- Dispatcher and jailer duties intermix.

- Door controls for building and jail operations are integrated into the radio console system.
- Some PTT id alias functions work.
- No emergency button operation.
- Console system is a Motorola Centracom Gold Elite donated from City of La Crosse back in 2013.
- Intercom operations integrated into radio console system.
- Lobby speaker not working.
- CD sirens tested first Wednesday of the month.
- Building generator not exercised under load.

LAW ENFORCEMENT

- > Gencomm & Belco provides Sheriff Department upfitter support.
- > Baycomm provides system maintenance contract support.
- VRS operation in Sheriff's department.
- Law enforcement Richland Center/Viola/Lone Rock PD.
- Bear Valley area is a dead zone.
- Lone Rock tower does not perform well on Law Repeater.
- Computer messaging used to avoid scanner land.
 - At one time, encryption capabilities.
 - Kenwood products

FIRE

- ➢ 800 North − dead spot
- Highway 130 by Bear Valley dead spot
- Highway 113 dead spot
- Casenovia EMS poor paging coverage
- > Use of cellphone communications in case of HIPA requirements.
- Fire ground channels are available.
- Stored voice paging is used.
- Iam Responding is available
- IFERN operation from WRCO poor.
- Viola coverage area on Fire poor

EMS

- > No dedicated radio channel available for use.
- \triangleright

SERVICE FIRMS

Various service firms have played a part in providing Richland County agencies radio communication equipment and system support. Brought on using multivendor equipment in the purchasing processes which can create operational challenges. Given the analog design parameters used today these challenges are minimal and easily overcome with some good documentation.

Richland County's system equipment also relies on various vendor and model equipment. Primarily supported today by Baycom Communications (Motorola) the challenge are found when various vendor equipment come together at the interface points. This again is not to a great degree with the design model in place on the current system.

12 INTEROPERABILITY FINDINGS

Interoperability in radio communications is a key focus in providing effective public safety radio system operations and becomes an important part of any system replacement process. Although many possible options can provide interoperability avenues it is key that solutions always be focused on simplicity of use and ease of operation to the emergency service user. This effectiveness helps assure that the end user will rely on these services during a time when stressful situations can slow the processes of understanding.

Interoperability communications also becomes more of a concern with the movement of public safety systems to multiple frequency bands, digital operations, and encryption services. Richland County users today rely on simple programming avenues of implementing other neighboring user's information into department radios or relying on mutual aid channels.

12.1 INTEROPERABILITY OBSERVATION POINTS

The following were identified during this study and represent key points of understanding about the existing Richland County interoperability needs and concerns.

- Subscriber equipment radio channel naming is not identified in a common County document for all agencies to put into practice. Accurate radio frequency and naming of channels is key to assure communication.
- National mutual aid channels do not follow National Interoperability Field Operations (NIFOG) standards on many stakeholder subscriber equipment.
- All neighboring counties appear to operate radio systems on the VHF frequency band, but some have migrated to digital (P25) configurations.
- Interoperability system channels are limited in the dispatch center support.

13 RADIO COVERAGE

13.1 TERRAIN

The terrain of Richland County is heavily weighted by the Wisconsin river valley provideing the southern border of the county. Low areas along the river extend like fingers up into the county that can easily rise over 500 feet to the high points on the northern end of the county. The County is also somewhat impacted by the Kickapoo river valley to the same extent in the northwest corner of the county.

These dramatic change in elevations from the river valleys not only provide challenges to coverage based on elevation changes but also usually means the presence of larger wooded areas with foliage losses to overcome. This is defined as land clutter displayed below and is calculated into prediction models.



587ft to 706ft 707ft to 826ft 827ft to 946ft 947ft to 1066ft 1067ft to 1186ft 1187ft to 1306ft 1307ft to 1426ft

13.2 LAND CLUTTER

Clutter predictions are defined to identify loss factors needed to anticipate signals being reduced by natural and manmade items. As with many Wisconsin counties Richland is defined by the forest and agricultural categories. Agricultural plays a key role impacting radio communications during the summer growing season. Other factors such as the Urban category is minimal in the county with mostly

smaller communities.





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13.3 COVERAGE PREDICTIONS

Coverage predictions calculate an estimated signal level that would be received by a field unit from a repeater or base station antenna and signal levels received by a base station from a user radio operating mobile or portable. Predictions use the effective radiated power level allowed by the FCC license, terrain, land use, and body losses among other attenuation factors in the calculations. Reliability and fading factors are also used in the calculation to provide a realistic map of system expected performance.

The minimum receive sensitivity level of portable receiver designs today will vary but commonly falls from -120 to -117 dBm (0.22μ V to 0.32μ V). Any signal level appearing at the receiver antenna less than the minimum would be considered noise and not be decoded.

The larger the signal level, the more attenuation the receiver can overcome. Once the received level exceeds the atmospheric noise, man-made noise, body loss, and path losses, it is possible for the receiver to decode a signal. In predictions, a reliability factor is also added to overcome losses that may be present in any location. In general, for analog systems, this is about 20 dB which increases the required design signal level for public safety portable on the hip performance to -97 dBm. For digital, an equivalent level is about -107 dBm due to processing gain and the quality of the delivered audio. Digital P25 systems will generally recover the system losses introduced by the previously FCC mandated narrowband conversion a few years back.

Due to the curvature of the earth and how this affects VHF – 800 MHz, portable coverage from a 180' tower is limited to about 6-7 miles; thus, this is also considered.

The provided coverage predictions for operation use a set of levels separated by a predefined range. Every 10 dB in change indicates a 10X change in power level. For the TNCG predictions, the following scheme has been adopted for comparisons:

- Gray color is used to indicate a signal level that falls under a receiver's ability to decode.
- Red areas are outdoors and found to be unreliable.
- Yellow range is considered operational for on-the-street operations.
- Green range indicates good portable (small building) indoor coverage.

Note: Some common structures (i.e., metal clad exterior without windows, stone exterior courthouse, LEC, hospital, etc.) may be even more difficult to penetrate due to their construction.

Out of Range	Unreliable	Street Level	Building Level

The computer-generated predicted coverage may show an area is not covered, while experience says this is not the case. Also, other areas showing coverage may in fact not have coverage due to factors not considered in the model. Predictions use the losses noted above to provide a coverage estimate. Overall, they are found to provide good indications of the coverage to expect. Thus, most designs factor in some headroom to ensure they are conservatively ensuring acceptable coverage.

Keep in mind that these areas are a range of signal levels, and the level tends to get stronger closer to a tower and weaker as one moves away from the tower location. A yellow level closer to the tower can be quite a bit stronger and more reliable than the yellow level five miles further away from the site. It would be possible to provide an increased breakdown of these levels, but that would require a greater level of understanding and has shown to be more confusing. Viewing the model from a high level of seeing where signal flows evenly away from a site, or where unreliable areas come into play gives the general understanding needed for County decision making.

13.4 COVERAGE PREDICTIONS FOR CURRENT SYSTEMS

Coverage predictions for the current analog system are found on the following pages. Predictions include Mobile Talk Out (MTO), Mobile Talk Back (MTB), Portable Talk Out (PTO), and Portable Talk Back (PTB).

C in sign 11 Figure 1- Portable Talk Back

13.5 BUNKER HILL SITE



Figure 2- Portable Talk Out



13.6 EAGLE TOWER SITE



Figure 4 – Portable Talk Back



Figure 5 – Portable Talk Out







13.7 LONE ROCK SITE

Figure 8 – Portable Talk Out



13.8 SYLVAN SITE



Figure 10 - Portable Talk Back



Figure 11 - Portable Talk Out



13.9 TOWER HILL - USCC SITE



Figure 13 - Portable Talk Back



Figure 14 - Portable Talk Out



13.10 WRCO SITE



Figure 16 - Portable Talk Back



Figure 17 - Portable Talk Out

13.11 LIKELY SERVER

TBD

Figure 18- Likely Server Map

Figure 31 helps provide context of site performance when comparing all available locations to Richland County. This map distinguishes where sites provide a coverage threshold (-100 dBm) giving an indication of which might better serve the subscriber radio.



Elev Gain/Loss: 5927 ft. -5724 ft Max Slope: 48.7%, -53.1% Avg Slope: 15.1%, -14.9 : 12.7 m



14 TECHNOLOGY OVERVIEW

14.1 FREQUENCY BAND

Which frequency band should be selected for operation and why does it matter? At one time, it was extremely important to know the exact frequency. Crystals were ordered for the radio, and they took time to obtain. That has long disappeared, and today a radio capable of covering almost every frequency is available. Convenience comes with a price tag and physics has not changed.

It is also important to understand how the frequency bands are configured and used. For a discussion of public safety radio bands, the terms VHF, UHF, 700 MHz and 800 MHz are used to define the bands for discussion. The physics of radio signal propagation gets involved as 700 and 800 are essentially one band to the radio manufacturers, and inbuilding coverage is better than VHF. Thus, 700/800 band operation is more common in metropolitan areas, though it is growing in its use in rural areas also for other reasons. There is little "skip" in this band to deal with, and antennas are smaller thus offering greater flexibility. Tests have been conducted by others comparing VHF, UHF and 700/800 MHz. There were only negligible differences outdoors for portable operation, but VHF underperformed the other bands indoors.

Band	History	Spectrum	FCC Plan	Advantages	Disadvantages
VHF	Came along after low band.	150 – 174 MHz	Scattering of frequencies thus no plan for trunked operation.	Travels long distance well as follows earth's curvature	Does not penetrate structures well due to the length of the wavelet length. Skip due to atmospheric conditions.
UHF	New radio development allowed this new band to be created.	450 – 470 MHz	Planned for repeaters 5 MHz splits.	More line of sight than VHF and shorter wavelet offers better in-building penetration.	Most of the band was given over to business operations thus sometime public safety must purchase the frequencies from a broker.
700	Created from the upper UHF television service which was not being used.	700 MHz	Planned for repeaters 45 MHz splits. Narrowband operation only for voice.	Line of sight operation thus requiring higher repeater antennas but excellent in- building penetration Penetrates structures well, sometimes called the sweet	Must operate narrowband and there is some adjacency to the planned use of FirstNet which has the potential for interference.
800	Created from assigned channels and expanded when Nextel frequencies were released.	806 – 866 MHz	Well planned with 45 MHz splits and wideband operation.	band. Still wideband capable operation and supports both metro and rural operations.	Sometimes difficult to obtain spectrum in some areas of the country.

14.1.1 TABLE OF FREQUENCY BAND TECH SUMMARIES



14.2 OPERATIONAL TYPES

Voice radio system operations fall into two main configurations: conventional and trunked. Both conventional and trunked operation can support digital services. Voice operation, however, uses narrow bands, 12.5 kHz or less per channel on 700 MHz, VHF, and UHF bands. With digital, however, it is possible to combine two voice channels into one RF channel typically using time division multiplexing (TDMA) for public safety which is how P25 Phase 2 operation occurs.

The conventional radio system configuration can be described as conversations taking place on one piece of radio equipment in a manner that lacks much intelligent control. Conventional operation can normally be thought of as a one-channel function in a system configuration. In turn, the subscriber equipment trying to communicate with this configuration need only know the frequency and the access code needed to open the audio path. Conventional operation can be set up in the various categories (simplex, half duplexer, or repeater) based on the actual equipment being used.

The second system type is trunked radio which comes from the telco industry and describes a group of radio equipment shared by several user groups. This type of configuration takes the various pieces of radio equipment and interconnects them via an intelligent controller thus distributing them as needed. Trunked systems are always multiple repeater systems. To use these systems and open a path for the voice conversation, the control equipment must approve a request by a user and inform the users who wish to communicate. When this wish is granted, a two-way conversation can take place on a computer-assigned channel. This constant need for communication between the system and the subscriber dictates the need for constant data exchange and more intelligent subscriber radio equipment. Trunked radio can support hundreds of short communications sharing a few channels, though it can be much more expensive than a conventional operation. The real power of trunked radio is the fact that all users of the system can become part of a talkgroup if needed and that priority messages can be sent to all system users quickly and easily. APCO Project 25 is one specialized use of trunking technology that goes to a higher level of interoperability than with the old Project 16 capability of the 1979 vintage of trunking (Smartnet and EDACS).

In less dense rural areas, conventional is generally used due to the limited number of user groups and number of communications to be supported. In larger areas, trunked radio systems allow many users/groups to share a smaller number of radio channels using the spectrum more efficiently. Interoperability can also be vastly improved, and special services incorporated.



14.3 ANALOG OR DIGITAL MODULATION FORMATS

Voice radio communications, like many of the modern technology systems, is migrating towards digital operation. It has been experienced in many of the areas we are all familiar with such as movies, music, television, cell phones, and computers.

All transmissions modulate the carrier frequency in some way directly by using the analog waveform received from the microphone. With digital, the voice is converted to bits and this digital signal created from the analog voice signal is compressed and then transmitted. Digital technology allows the audio to be nearly free of the noise heard when receiving a weak analog signal through a process defined as vocoding. It is also helpful in eliminating background noise and allows for overhead messages to be sent with the encoded voice data to provide user identification, priority, and other data used for system operation.

However, digital operation has the potential of not providing a user with an indication when the user is at the end of usable system coverage. Before the coverage cutoff, the received signal is near perfect and then can drop. The range of a properly designed digital system will extend beyond that of the comparable analog system, though the important phrase here is "properly designed." If trunked, then an alert tone can tell the user when the radio is out of range.

14.4 DIGITAL PLATFORMS

There are multiple digital formats in use today. Public safety has adopted the APCO P25 standard for digital communications. TETRA is an ETSI standard that has been adopted by countries in other parts of the world. Only P25 and TETRA are intended for use by public safety as they have incorporated features needed by public safety; the other forms described in the next paragraph do not have these features.

Other common digital formats are DMR (digital mobile radio), NXDN (Next Generation Digital Narrowband), and TETRA (Terrestrial Trunked Radio). These other formats are not compatible with P25 or with each other. NXDN was designed for commercial Private Land Mobile Radio and low-end public safety communications systems. NXDN is offered by ICOM (IDAS) and Kenwood (NEXEDGE), but each company has implemented unique versions and are not 100% compatible. Except for NXDN, multiple vendors manufacture field radios that operate in these formats. Only ICOM and Kenwood make field units for their unique versions of NXDN.

14.5 APCO P25 STANDARD

APCO P25 digital is the technology adopted by the United States as the standard digital protocol for public safety radio systems. Systems can operate in a conventional mode where each user group communicates on a single channel, or in a trunked configuration where user groups share a set of channels. The overall goal of having a common digital standard is interoperability in the digital mode of operation for the end user. Without a common standard, radio users would be forced to a manufacturer and the equipment they produce and unable to talk to another manufacturers' equipment.

P25 Phase 1 operation has been proven to have better coverage than analog using the same tower locations. When the FCC announced narrowbanding, it was recommended users consider P25 to recover the lost coverage resulting from this action.

It should be noted, however, P25 defines the air interface signal between the radio user and the system of repeaters. Once the signal from the repeaters moves into the system infrastructure, there is no standard, and each manufacturer has created its subsystem. Thus, in most cases, everything from the repeater to the console and everything in between is proprietary. Standards are under development to allow these systems to be interfaced using a gateway product. Non-OEM equipment is possible to use, but some of the features of the trunking system will be lost or modified.

The P25 standards are not a finished product. Like all standards, they are continually being refined and thus do not mandate all functions of a P25 system. Some functions are defined by the vendor and used to create differences in product capabilities giving vendors an advantage. Great care must be taken in the selection of features being used to ensure these unique features do not get in the way of interoperability with neighboring P25 trunked systems.

Today, P25 is divided into what has been defined as Phase 1 and Phase 2, with Phase 1 being the most common. Within Phase 1, the standard was each RF channel would support one voice channel, while with Phase 2 each RF channel supports two voice channels. A slightly different form of modulation (full rate or half rate vocoding) is used for each thus requiring transcoding if interoperability is needed. All newer P25 radios can support both Phase 1 and Phase 2, while some older radios only support Phase 1 channelization.

For trunking to work, there is a requirement for a control channel which means this channel does not support any voice traffic but rather controls all the subscriber radios in the background. This channel is the same for either Phase 1 or Phase 2 operation and operates at 9.6 KB/s. It is monitored by all radios on a system and must have continuous communications always established to all radios on the system. This channel is also used to authenticate a radio attempting to be added to a trunked system by exchanging unit ID information and doing a lookup on the associated database.

14.6 ENCRYPTION

Encryption operation on voice radio channels adds a layer of protection to the users to assure information is not easily obtained by the wrong individuals. Most encryption operation is standards-based in the modern public safety radio system with AES-256 the most commonly accepted for public safety.

Encryption in an analog mode of operation impacts the quality of the voice signal causing it to sound different than the normal voice. It does not happen in a digital system configuration as the scrambling operation is put back into its normal digital state before being outputted. It is highly recommended encryption occurs in the mapping of talk groups as a defined group and not turned on/off as needed by the user.

Generally, with trunked radio systems, encryption is applied by talkgroup; whereas, in a conventional system, encryption would be by channel. Thus, with a County wishing to encrypt, a channel or channels would be set up for this application. There is a cost to encryption both in licensing per device and in maintaining the capability in an up-to-date fashion with routine changes to the encryption key. Re-keying requires touching every encryption capable device or using over the air encryption on a trunked system.

14.7 VOTING SYSTEMS

Radio communications in its purest form is a transmitting device emitting a signal that is heard by a receiving device. The quality of this operation is dependent on many variables such as power level, antenna, height, and others. The main improvement for expanding a systems coverage area is accomplished by increasing the antenna height of the base or repeater being operated. Once this is done, the ultimate weak link to any communications system is the field (subscriber) unit due to its lower power. Thus, the signal being sent out to the field unit will be stronger than the signal back from the field unit.

Voting systems are designed using receivers placed at multiple sites to collect the weaker signals and return them (via a backhaul system) to aggregate these signals at a common location where they are compared, and the best signals are used for dispatch audio and retransmission. Voters can select the best signal multiple times per second. This operation can be used to match the talk out and talk-back capabilities of a voice system which is referred to a balanced system. Which is the design goal in engineering a quality system.

Voting and remote receive sites are common with VHF conventional systems allowing for the lower power portables to be received, while a higher power repeater transmitter can make up for the losses between the repeater sites and the subscriber radios.

With UHF and 700/800 MHz operation, a tower top preamplifier at the repeater can overcome these same losses thus pretty much eliminating the need for voting. Tower top preamplifiers cannot be used in the VHF band due to excessive atmospheric noise. Analog voting and digital voting is done differently. With analog, signal to noise is used while with digital, received Bit Error Rate is used for the selection.

14.8 SIMULCAST SYSTEMS

Systems needing to move beyond the reach of a single transmitter site with or without voting operation must look to multiple transmitters. Simulcast operation is the process of transmitting identical information from multiple transmitters all using the same frequency that may or may not overlap each other in their coverage areas. This process expands the transmit capabilities of a network to an almost limitless coverage.

Simulcast requires repeater equipment that is designed to produce virtually identical modulation characteristics. A backhaul system (usually microwave) distributes copies of the traffic to be transmitted to all sites. Most simulcast systems use a GPS clock to control frequency. All repeaters that transmit on the same frequency must be able to maintain identical transmitter frequency, phase, and modulation such that field units detect little difference in signals transmitted from different locations.

With trunked radio, both simulcast and voting are incorporated, while with conventional systems they may or may not.

14.9 MULTICAST SYSTEMS

Systems needing to move beyond the reach of a single transmitter site with or without voting operation must look to multiple transmitters. The multicast operation is the process of transmitting identical information from multiple transmitters using multiple frequencies that may or may not overlap each other in their coverage areas.

For this multicast operation to be seamless to the end user, a smart radio platform needs to be in place. Radios need to be able to locate systems (sites) on their own using a scanning operation referred to as roaming. Otherwise, users would need to switch channels manually based on location and their knowledge of coverage. As a rule of thumb, multicast is normally used in wide area networks where sites are spread out and simulcast is used where sites are more closely spaced in smaller networks.

14.10 BACKHAUL AND NETWORK SYSTEMS

Most modern multisite radio communication systems can only provide the level of services needed with the assistance of a backhaul system. Backhaul systems transport the information to various locations which allow for wide area operation status and control. Any number of mediums can be used for the backhauling operation to include telco, fiber, and even radio (in some situations though the FCC frowns on radio and may not license). For public safety, licensed microwave radio is generally used to interconnect infrastructure sites as the telco circuits have been found to be very unreliable. Fiber would be the second choice, though it does not meet the reliability of microwave unless there are two completely discrete physical paths.
As with voice radio systems, microwave radio comes in many different varieties and operates on various frequency bands. To ensure reliability, paths must be engineered to provide five nines (99.999%) reliability. To improve reliability, public safety systems generally use a ring topology that allows backhaul traffic to run in either direction away from the site in case a link should be disabled keeping all radio sites operational. If fiber optics is available, it can be used as an alternative to microwave operation, but it should also have multiple routes for reliability.

As most communications systems today utilize IP vs. analog, microwave is no different with most manufacturers supporting digital interfaces and system management. With this move to digital and IP, the network has now become an integral part of the radio system. The network technology defined as Multi-Protocol Label Switching (MPLS) has become the fabric support full integration of microwave and fiber optics plus the entirety of management and alarming.

There are also multiple bands of possible microwave radios with some being dedicated licensed channels and others, like Wi-Fi, unlicensed and shared use with little to no protection. Common licensed bands for public safety are 6 and 11 GHz, while unlicensed are 5.2 to 5.8 GHz. The 4.9 GHz public safety band is another choice though for microwave it is registerable as secondary use and thus in some areas, not a good choice.

14.11 PAGING SYSTEM

Paging operation is used to alert emergency service personnel of the need to aid over a paging device. Traditionally, the paging system was operated on the voice channel, and the paging device allowed the user not to have to monitor or concern themselves with traffic not requiring their assistance. The device is alerted by sending out a specific code and following it up with a voice message. This type of system is commonly referred to as a tone and voice paging system.

Some communities have also implemented alternate systems to enhance the paging system by incorporating systems that rely on cellphone operations. Messages are delivered to the phone devices normally via a Computer Aided Dispatch (CAD) system interface. This interface removes any burden of additional work needing to be done by the dispatcher. Cellphone alerting operation can provide levels of service such as two-way communications that are not available in standard paging systems. Without the guarantee of a timely message receipt, these types of systems must be relied on as secondary to the primary paging system as per the NFPA 1221 standard.

Choices in a modern primary paging system start with types of operation desired in use. What the voice style of system relied on for so many years is still available, but some users are also looking at a messaging type of system that mirrors the cellphone type of alert delivery. The type of method preferred is more of a preferred operational decision than any technical decision and is the starting point of knowing what options are available in a replacement option. Messaging system choices will require the move to implementing a separate voice and paging radio system. Choosing to stay with a voice paging system may allow you to leverage the voice network to deliver the alerting operation as it did in years past. Voice paging can even be delivered on a P25 radio system with specialized pager devices.

14.12 VEHICULAR REPEATER SYSTEMS (VRS)

In its simplest form, a VRS system is a low powered radio device connected to a mobile vehicle radio (usually existing) that communicates to the standard portable radio on a new (separate) channel. Which allows the low powered portable radio that cannot reach the system to communicate to the VRS which is then sent to the system through the high-powered mobile radio that can reach the system. These devices add a layer of operational understanding which requires specific configuration and protocol implementation.

The use of VRS/extenders by some designers has been to implement this technology in all vehicles in a system with mobile-only coverage to provide portable performance. Assuming all portable base communications will happen within proximity of the associated VRS equipped vehicle. This concept is generally not accepted when all the protocol, operational aspects, and technical inadequacies are reviewed in detail. None of the repeater/extenders manufacturers suggest this concept as the best use of their technology. In fact, some of these manufacturers have gone so far as to describe ways and means where it will not work. Great care must be used to reduce the impact of interference and not following protocol in their use to avoid problems and thus officer communications abilities at critical times. Thus, buyers need to be fully aware of the limitations while understanding their capabilities.

Most system designs never provide 100% coverage for mobile operation much less portable due to the cost of the infrastructure. Modern public safety systems are designed to provide 95% portable coverage and still may have areas where mobiles cannot communicate with the infrastructure. Vehicular repeater technology can improve communications performance in some areas that do not meet the coverage goal in portable based system solutions. The conceptual designs offered and presented all assume the desire for the County to create a solution for the infrastructure to provide portable coverage to a relatively high level throughout.

Vehicular repeaters have been used to improve or provide portable communications for specific locations like schools, hospitals, or industrial parks depending on the need for such service. For locations that require routine or daily service, the infrastructure would be built to provide in building performance or a bi-directional amplifier (BDA) and distributed antenna system (DAS) could be considered for such areas.

Some very rural areas such as the Dakotas, part of Wyoming, and Montana have made use of vehicular repeaters to allow portable operation. A vehicle repeater would be utilized to provide portable coverage in the immediate area of the vehicle by extending the signal from a nearby fixed repeater. Since they are limited by mobile coverage and the ability of the portable to communicate with the mobile, performance is very difficult to model. Due to its ad hoc usage and protocols required for use, some have dropped this solution from consideration from daily use. To ensure portable operation using a vehicle repeater, the infrastructure of the radio system would be designed to the greatest degree possible for mobile coverage. Any gaps in mobile coverage would prevent use and not be cost-effective to correct.

How would the vehicular system work? If the vehicle repeater is mounted in a vehicle when an officer arrives on scene at an incident, what means is used to turn it on? It could be as simple as removing his/her portable from the vehicle charger, manually switching it, wiring it to the officer's seat switch, or some combination. The selection of which type of repeater/extender to use may involve such needs as encryption, cost, feature extension, or other factors.

Some devices only support analog operation by the portables, while others offer P25 digital. Some disconnect the ability to use their mobile when energized, and some do not. The cost of these extenders can range from \$7,500 to \$12,000 depending on the desired capabilities.

14.13 SIREN CONTROL SYSTEMS

There are numerous methods of controlling sirens via radio frequency channels including a one-way or a two-way system, analog or digital. P25 is seldom ever used, while Two Tone page tones, DTMF (dual tone multi-frequency) or FSK (frequency shift keying) could be the controlling method. With one-way paging, it is unknown if the siren works; though, with two-way capability, FSK is usually the method. Secondarily, some siren systems allow for voice to be delivered and then again, FSK is the desired control. FSK is the fastest form of setting of the sirens and most secure.

14.14 TOWER STRUCTURAL ANALYSIS

As radio communication towers are like any man-made structure, they are engineered to certain guidelines and making changes to a structure should only be done when assured they don't risk exceeding that engineering. With public safety radio towers, it is even more important that the engineering holds up to strict levels.

The specific services required varies, and the information below identifies possible work to be performed on any given site work:

Field Inspection, Data Collection & Surveying

- Complete property/boundary and lease parcel survey.
- Develop lease survey map of the proposed tower site including access and utility easements with legal descriptions. Map to include easements and other encumbrances identified in the Title Report
- Stake out lease parcel corners and easements
- Provide 1A certificate for proposed tower center coordinates.
- Complete field topographic survey of proposed project site to document existing conditions and map out existing site features. Survey to be used as the basis for project design and construction.
- Establish a minimum of 2 project benchmarks. Vertical control to be tied to NGVD datum
- · Horizontal control to be based upon County coordinates.
- Develop topographic map of project site. Topographic map to include mapped topographic features, utilities, contours and other items necessary for project development.
- Furnish final map(s) in electronic pdf format.

Zoning and Construction Drawings

- · Perform site visit to review existing site conditions and project constraints.
- Develop Preliminary Review (PR) / Zoning level drawing set which depicts the general orientation and location of the proposed improvements. PR drawing set to include: o
- Existing Site Plan
- Site Plan
- Tower Loading/Elevation
- Upon approval of the PR drawings, develop detailed construction drawings (CD) for project sealed by a Wisconsin Registered Professional Engineer. Construction drawing set to include:
 - ✓ Existing Site Plan
 - Site & Compound Plans
 - Grading & Erosion Control Plan
 - Utility Plan
 - Landscaping Plan
 - Tower Loading/Elevation
 - Grounding Plan
 - Shelter Foundation Plan
 - Details: ice bridge, fencing, grounding, site construction and feed line routing.
 - Provide PE Sealed pdf soft copy and up to (10) ten hard copy originals and of the completed drawings.

Water Tower Structural Analysis

- Perform pass/fail structural analysis of existing water tower structure, foundation and top railing system to support the proposed antenna and equipment installations. In the case of a fail situation, modification design has not been included and if required shall be considered an additional expense.
- Existing water tower plans including foundation design to be provided at the project outset. Additional fees shall apply for services associated with procuring plans from the water tower manufacturer.
- Provide electronic pdf deliverable of completed structural analysis report.



Tower Foundation Inspection

- Perform one-day site inspection at time of tower foundation installation, including the following:
 - Check soil conditions for general compliance with the geotechnical report. It should be understood that the in-situ soil properties can be difficult to verify conclusively, especially with the reinforcing steel in place. However, at a minimum a check for general conformance with the soil type, depth, depth of water, etc.
 - Check overall excavation dimensions for general compliance with plans
 - Check reinforcing steel for property quantity and placement
 - Check for proper concrete cover on reinforcing steel
 - Cast concrete cylinders for compression testing
- Upon completion of inspection, collect the concrete cylinders and deliver them to a certified laboratory for compressive strength testing. Testing will be completed until the design strength is met (7, 14 & 21 days) with final break at 28 days.
- Provide construction inspection field report (pdf) documenting the results of the inspection. The report will contain photographs of the foundation installation and pour.
- Provide concrete break results as they become available.

5. Punch List Inspection

- Perform site inspection at time of substantial completion to review installed tower and civil improvements. Inspection to include a tower climb to review tower construction, antenna installations and to develop an As-Built inventory of equipment installed on the tower. At grade inspection to include grounding system resistance test, generator functional test and tower plumb and twist verification.
- Develop Punch List of items requiring additional work by the Contractor. Punch list to include photographs of problem items, descriptions and identification of responsible party.
- Provide field report (pdf) documenting the results of the Punch List inspection. The report will contain photographs of the site, As-Built antenna inventory and test results.

6. Final Inspection

- Perform at grade site inspection (no tower climb) to confirm completion of Punch List items and document As-Built site conditions.
- Update overall project Punch List based on observed conditions.
- Coordinate with Contractor for completion of any remaining Punch List items.

7. As-Built/Record Drawings

Prepare final Record Drawings (RDs) for site to document As-Built conditions. Drawings to document Change Order items and other project changes implemented during construction.

8. Specs, Bid Documents & Public Bid Process

- Prepare detailed CSI specifications which clarify requirements for major project components and work items
- Prepare Project Manual which includes project drawings, bidding requirements, contracting requirements, and project specifications suitable for Public Bidding of project.
- Advertise project and facilitate public bidding of project in accordance with local purchasing requirements
- Conduct on-site Pre-Bid Meeting (if desired) to review project requirements and answer Contractor questions.
- Issue Addendum(s) as necessary throughout bidding process.
- Provide Bid Summary of received bids and provide recommendation for Contract Award.

14.15 GROUNDING AND POWER

Grounding is a term used to describe the function of protecting equipment against damage from electrical surges. Surges can come through the electrical system, but the more common source is lightning created during storms. Radio systems have always been concerned with lightning strikes due to the use of antennas mounted on towers that attract a strike. With modern technology, the issue of the power line and telecom surges has become more of an issue that must be addressed.

Along with those needs, modern electronic equipment must be extensively protected from surges due to the low voltage levels from which they operate. A higher level of concern must be placed on assuring practices are followed and verified to assure equipment longevity of the modern radio system.

Grounding and power practices and standards have been created by the major manufacturers of radio equipment and have been in use for some time such as Motorola's R56. The National Fire Protection Association (NFPA) has produced guidelines for safety for electrical power systems, and there has been a tremendous amount of research thus providing a safer environment for personnel. There are two specific standards: Part 70 (National Electrical Code) and Part 607 (Grounding).

14.16 EXTENDED MOBILE COVERAGE SPEAKER-MICROPHONE

A new option being considered to provide communication range extension to an officer away from the vehicle is that of a wireless speaker-microphone device using the vehicle radio. To the best of TNCG's knowledge, Safemobile is the only company that makes this product today. This subsystem replaces the normal wired microphone on a mobile radio with a wireless microphone utilizing the 2.4 GHz unlicensed frequencies to cover a line of sight range of up to 1600 radius feet around the vehicle. Its battery charge life is more than 12 hours under normal usage.

Additional features include the potential of encryption, emergency button, earphone, talk-around to other like devices, and noise canceling. Each speaker-microphone only pairs with one mobile radio; thus, it is a one-to-one extender and not like the previously-described repeater/extenders. Price is estimated from \$550 to \$900 with the basic interface.

Users of this option would be those who may leave their mobile but be near enough to take part in effective communications. This device could also be considered for use for communications at a small office or County shed where a control station is used to communicate with mobiles in the field. It could minimize or eliminate the use of remote-control devices. As with all applications, it is completely dependent on its ability to communicate back to the radio. If 2.4 GHz is used for Wi-Fi, then there is also the potential of local interference which should be subject of determination when attempting to use.

14.17 BI-DIRECTIONAL AMPLIFIER (BDA) AND DISTRIBUTED ANTENNA SYSTEM (DAS)

Depending on the desired coverage requirement, the radio system infrastructure is designed to deliver a specific level of the signal to the user service area. In any portable based coverage design, outdoor performance is to be achieved at a minimum but may include in-building performance whether it be residential (8dB), commercial (15dB), or some higher level of desired performance.

To achieve these levels, the outdoor performance must increase by the level needed to penetrate the building and provide the indoor performance. Any level over the commercial level may be attainable close to a tower site, but generally, the cost of the infrastructure escalates and limits the level of indoor coverage attainable.

In most radio systems, there will be buildings that users will desire to have communications within, but the level of attenuation exceeds the delivered level of the design making communications impossible. For those buildings where, communications are necessary on a regular basis, a bi-directional amplifier system can be considered.

These systems have a donor antenna mounted on the outside of the building which brings the desired radio signals (talk-out) into the building. These signals are amplified and distributed throughout the building as required via distributed antenna system (DAS). This same DAS system also collects the indoor signals (talk-in) and sends them back through the amplifier sent back out the donor antenna.

These systems are designed specifically for the radio signals desired for operation. Some communities have adopted ordinances that require new buildings to be equipped with such devices to ensure public safety communications. Others have installed such systems to ensure public safety communications. The improperly designed system can cause self-interference or interference to other radio systems.

To properly design a BDA/DAS system for a building, the radio system should already be in operation or at least optimized for operation as testing should be done to determine the amount of signal is penetrating the building. Once this is known, the areas that require improvement can be determined and a design completed. Unlike legacy DAS designs where the antennas were placed in the interior of a building to send signals outwards, new designs aim signals into the interior. Digital radio, whether it is cellular, P25 or any other digital format, must be able to decode and process the digitally modulated signal. Signals received from more than one source may not be able to be decoded due to a phase difference. Keeping outdoor and indoor signals separated will eliminate self-interference.

15 COMMERCIAL SERVICE OPTIONS (FIRSTNET)

15.1 COMMERCIAL SERVICES

Today, commercial wireless service providers are integrated into public safety systems in many aspects as an adjunct to the private-public safety systems. Those integrations are continuing to evolve with the implementation of more and more networks providing an ever-improving technology solution to the end users and improved coverages. The lack of priority and control is the mechanism for measuring the degree of reliance each agency is comfortable with using these ever-expanding networks.

Historically, organizations began to rely on the use of voice cellular services to supplement radio conversations or enhance communication capabilities where possible. Voice communications along with the use of add-on alerting systems used by fire and ems services over cellular are key examples of that supplement, and support users rely on in their duties. Probably the most key shift to commercial services is in the use of data connectivity services.

Many agencies implemented stand-alone data systems attempting to provide their users' services for messaging, data access, and digital work platforms. Most of these systems have been shelved today and have moved to commercial wireless broadband services providing a higher level of system performance at a reduced operating cost to the public safety agencies. Other limiting factors to a standalone data system also played a role in the shift and must be considered when analyzing this use of commercial data services and why it ultimately worked better for most agencies. However, current cellular commercial service options today see a public safety user no different than any other user of the services, and this can be problematic. FirstNet is intended to fix the priority services that commercial services lack.

15.2 FIRSTNET

To overcome commercial services limitations encountered by public safety users, the federal government introduced a dedicated solution. The First Responder Network Authority (FirstNet) of the United States was created under the Middle Class Tax Relief and Job Creation Act of 2012 (MCTRJCA) as an independent authority within the National Telecommunications and Information Administration (NTIA).^[1] The purpose of FirstNet is to establish, operate, and maintain an interoperable public safety broadband network. To fulfill these objectives, Congress allotted 7 billion dollars, and 20 MHz of valuable radio spectrum to build the network.

The FirstNet authority then accepted a proposal from AT&T to be the contracted commercial service provider and build out this network. In turn each state had to decide the option to construct their piece of that network or allow AT&T to perform that service for them. All states ultimately approved the use of AT&T as their designated contractor. This approval process was completed in December of 2017, and AT&T's implementation plans are currently underway.

FirstNet is currently being launched on AT&T existing network as that network is being updated to band 14 operation and expanded to meet coverage requirements. This network will provide mission-critical, high-speed data services to supplement the voice capabilities of today's Land Mobile Radio (LMR) networks. Initially, the FirstNet network will be used for sending data, video, images, and text. The FirstNet network will also carry location information and eventually support streaming video. FirstNet plans to offer cellular voice communications such as Voice Over Long-Term Evolution (VoLTE) or other alternatives initially, but these are not considered public safety level systems. The goal of Mission Critical Voice (MCV) and Mission Critical Push-to-talk (MCPTT) over LTE does not have any identified timelines for these system implementations as the standards needed for operation have not been finalized to date.

The job of creating a nationwide wireless network from scratch to provide the level of services identified and deliver those services with the same robust levels of coverage in all areas would be considered a lengthy task. Possibly keeping the network from being ready for public safety users for years as the implementation of most County radio systems can take up to two years. The relationship between FirstNet and AT&T is more than just hiring of the firm to implement the network. It is the reliance on AT&T's existing network to begin delivering services, begin developing equipment, and being able to migrate user as the dedicated FirstNet frequency band is being installed. To accurately understand FirstNet's capabilities of service, it is important to understand these processes and how they apply in the area in question.

AT&T has already begun the process of FirstNet implementation using the existing AT&T network as a starting point. That network will deliver services to the capabilities in place today, and as AT&T develops the capabilities and features, those will be migrated into the platforms. Alongside this AT&T will be implementing the dedicated spectrum (Band 14) provided by FirstNet to increase coverage areas.

VoLTE is the proposed standard for the interface between a P25 trunked radio system and FirstNet. It should be noted, however, when this voice service becomes available for mass use is not yet on the timetable. FirstNet was developed first for data and video with this then being the priority. Most of the leadership in the development of FirstNet has suggested even after its full deployment, VoLTE should be considered secondary and not expect this service to replace radio to radio voice communications any time soon.

16 IMPROVEMENT OPTIONS FOR RICHLAND COUNTY

16.1 OPTIONS OVERVIEW

The following improvement options are presented to the County for consideration. True North used the information collected throughout this study to develop potential options that would likely serve the County for system improvement. These models are chosen to give the County varying levels of system technologies to consider as well as financial commitments needed to pursue these choices. It is not TNCG's intent to provide these models as an only possible solution but rather a point to begin the discussions of what the County may wish to pursue.

All options include budgetary pricing models with new repeaters, stations for regional interoperability, DC power systems, site equipment shelters, backup generators, alarm systems, a microwave backhaul network, and possible new towers (greenfield) and professional services. Coverage predictions were made using existing FCC database identified tower sites located in the County where possible. Greenfield sites (new towers) were used in models when no suitable sites were identified.

Appendix 4 & 5 shows a database of existing sites in and around Richland County.

Note – (GF) labeled sites depicted on below maps indicate greenfield sites not currently constructed or sites needing towers increased in height or replaced and budgetary estimates have been made to reflect.

16.2 COLORS AND COVERAGE REMINDER

The provided coverage predictions for operation use a set of levels separated by a predefined range.

- Gray color is used to indicate a signal level that falls under a receiver's ability to decode.
- Red areas are outdoor unreliable.
- Yellow is a range that should allow for on-the-street operations.
- The green range indicates good portable (small building) indoor coverage.

Note: Some common structures (i.e., metal clad exterior without windows, stone exterior courthouse, LEC, hospital, etc.) may be even more difficult to penetrate due to their construction.

Out of Range	Unreliable	Street Level	Building Level

16.3 RADIO SYSTEM OPTION 1

16.3.1 VHF ANALOG CONVENTIONAL SIMULCAST SYSTEM

This TNCG conceptual design option assumes Richland County wishes to stay operating in the VHF radio frequency band and attempt to slowly migrate subscriber and system equipment using a defined plan. A probable goal with this option would be improving radio coverage with a minimal investment or a possible migration of the radio system channels or sites and possibly analog to digital.

As a baseline design for providing the County an understanding of what might be a possible scenario, TNCG has chosen to create this option as a five (5) site VHF conventional analog system providing coverage. This option identifies a completed system design and assumes subscriber radios are handled separately.

- Designed using a minimal number of system sites and attempted existing site reuse where possible.
- Coverage holes or gaps will exist if system does not design for minimal public safety levels.
- The design needed a greenfield tower site to provide quality coverage in Lone Rock and ensure a successful microwave path.
- The design showed better results using two new lease sites on the west side of the County.
- The design anticipated two antennas (transmit & receive) per site and combining of all repeater frequencies.
- Simulcast/voted system design provides for expanded channel coverage and common channel footprint on each channel.
 - System design parameters were generated using a three (3) channel design, adding one (1) to the current County design.
- A standalone VHF analog paging system was anticipated in the design providing coverage from the voice sites.
- > The Highway channel was designed as a two (2) site mobile only channel.
- Microwave connectivity would be needed for simulcast operation and considerations for non-redundancy could be given to decrease the budget.
- The design anticipates the need for public safety grade compounds with backup power capabilities at each site.

- Design would allow County users to operate existing subscriber equipment. Costs not estimated.
- Analog operation fails to improve audio quality and interference noise inherent to the VHF frequency band.
- Dispatch console systems were replaced, and upgrades made to the PSAP in the budget.
- This design shows the main Richland County channels providing 60% portable on the hip indoor (small buildings) coverage.
- This design shows the main Richland County channels providing 90% portable on the hip outdoor coverage.
- This design shows the communities of Richland Center, Muscoda, and Lone Rock reaching the 95% public safety indoor (small buildings) coverage levels.

System Component	Description	Cost
Vendor Infrastructure & Services	Repeaters, control equipment, antennas, microwave, power, dispatch equipment, alarms, engineering, FCC licensing, installation, testing, commissioning, and training	\$1,710,500
Field Terminal Equipment	Mobiles, portables, and control stations including installations and associated accessories	\$ 0
Civil Construction Work	Towers, grounding, shelters, generators	\$995,000
Contingency	Additional funds set aside for unknown project needs	\$275,000
Professional Services	Civil, consulting, and project management	\$ 300,000
	Total	\$3,280,500

16.3.2 OPTION #1 BUDGETARY COSTS



16.3.3 OPTION 1 VHF COVERAGE PREDICTIONS

Figure 19 – OPT #1 - ANALOG VHF – Portable Talk Back



Figure 20 – OPT #1 - ANALOG VHF – Portable Talk Out

16.4 RADIO SYSTEM OPTION 2

16.4.1 VHF P25 DIGITAL CONVENTIONAL SIMULCAST SYSTEM

This TNCG conceptual design option assumes Richland County wishes to move radio communications to P25 digital operations and attempt to keep a minimal design configuration. Choosing to do so would provide the County with improved operating characteristics, system features, and some level of public safety coverage standards.

As a baseline design for providing the County an understanding of what might be a probable scenario, TNCG has chosen to leave this option as a five (5) site voice radio system. Switching the design to digital operation provides a level of coverage improvement. TNCG identified making the switch to P25 would require subscriber radio needs to be addressed.

- All equipment and parameter design configurations were matched to option #1.
- Locating a Greenfield site in this part of the County will be challenging to balance a microwave link and coverage footprint.
- Villages of Cazenovia and Viola still appear to be challenging for inbuilding coverage levels.
- System design parameters were generated using a four (4) channel design, adding two (2) to the current County design.
- The Highway channel was left as a two (2) site (Analog) mobile only system.
- A standalone VHF analog paging system was anticipated in the design providing coverage from the voice sites, however digital paging could be considered.

Coverage estimations show portable in-building (small) level operation at 70% of the Richland County boundary.

- Coverage estimations show portable on the street level operation at 85% of the Richland County boundary.
- System design parameters were used to balance the talk-in and talk-out design.
- Microwave connectivity is designed in a ring layout to provide redundancy on the voice network.
- > P25 system features such as encryption were anticipated in the budget.

- Digital operations would provide additional P25 feature sets and capabilities such as PTT-ID, Alert, Encryption, Emergency Button, etc.
- This design updates all subscriber radios in the County to public safety digital capable models capable of WISCOM operation.
- Improving coverage in the southeast corner of the County is difficult without pulling a site closer.
- Given the County terrain of ridges and river valleys, designs meeting 95% in building coverage may require a higher number of sites.

System Component	Description	Cost
Vendor Infrastructure & Services	Repeaters, control equipment, antennas, microwave, power, dispatch equipment, alarms, engineering, FCC licensing, installation, testing, commissioning, and training	\$2,572,000
Field Terminal Equipment	Mobiles, portables, and control stations including installations and associated accessories	\$1,350,000
Civil Construction Work	Towers, grounding, shelters, generators	\$1,100,000
Contingency	Additional funds set aside for unknown project needs	\$370,000
Professional Services	Civil, consulting, and project management	\$400,000
	Total	\$5,792,000

16.4.2 OPTION #2 BUDGETARY COSTS

16.4.3 OPTION 2 VHF COVERAGE PREDICTIONS



Figure 21 - OPT #2 - DIGITAL VHF – Portable Talk Back



Figure 22 - OPT #2 - DIGITAL VHF – Portable Talk Out

16.5 RADIO SYSTEM OPTION 3

16.5.1 VHF P25 DIGITAL CONVENTIONAL SIMULCAST SYSTEM

This TNCG conceptual design option assumes Richland County wishes to move radio communications to P25 digital operations and develop a system design to meet public safety standards. Choosing to do so would provide the County with improved operating characteristics, system features, and a portable in-building level of public safety coverage standards.

As a baseline design for providing the County an understanding of what might be a probable scenario, TNCG has chosen to migrate the design to a seven (7) site voice radio system. This system would standalone providing the County all necessary services.

- All equipment and parameter design configurations were matched to option #2.
- Locating two (2) Greenfield sites in the southern parts of the County will be challenging to balance a microwave link and coverage footprint needs.
- System design parameters were generated using a five (5) channel design, adding two (2) voice and one (1) dispatch (paging) channel to the current County design.
- The Highway channel was left as a two (2) site (Analog) mobile only system.
- > P25 digital paging was added to this system design, replacing all pagers.
- Coverage estimations show portable in-building (small) level operation at 92% of the Richland County boundary.
- Coverage estimations show portable on the street level operation at 97% of the Richland County boundary.
- System design parameters were used to balance the talk-in and talk-out design.
- Microwave connectivity is designed in a ring layout to provide redundancy on the voice network.

OPTION 3 BUDGETARY COSTS

System Component	Description	Cost
Vendor Infrastructure & Services	Repeaters, control equipment, antennas, microwave, power, dispatch equipment, alarms, engineering, FCC licensing, installation, testing, commissioning, and training	\$3,260,000
Field Terminal Equipment	Mobiles, portables, and control stations including installations and associated accessories	\$1,600,000
Civil Construction Work	Towers, grounding, shelters, generators	\$1,850,000
Contingency	Additional funds set aside for unknown project needs	\$520,000
Professional Services	Civil, consulting, and project management	\$480,000
	Total	\$7,710,000

16.5.2 OPTION 3 COVERAGE PREDICTIONS



Figure 23 - OPT #3 - DIGITAL VHF – Portable Talk Back





Figure 24 - OPT #3 - DIGITAL VHF – Portable Talk Out

16.6 ADDITIONAL IMPLEMENTATION CONSIDERATIONS

16.6.1 SYSTEM ONGOING COSTS

Modern radio systems require a greater level of facilities support and ongoing maintenance considerations than the previous generations of systems. Rules of consideration normally apply that the greater the size and scope of the system the greater the ongoing costs will be. Richland County is somewhat familiar with a few of these costs with sites in their current system. Other considerations should be understood to assure what level of needs will be added with any system update.

Additional Costs	Description	Cost
Tower / Lease Fees	Lease fees for use of tower space on non-owned properties fluctuate depending on owner of the site. Fees are usually based on height of antenna, number of antennas, and space used. Land lease fees also possible for greenfield sites.	Monthly Fee (Est. \$2,000 - \$5,000/month)
Electrical Services	Sites having a dedicated County shelter facility would have a dedicated electrical service feed and is common in a modern system. With greater amounts of equipment at a site, they tend to consume more power than older system sites.	Monthly Fee \$150 - \$300/month per repeater site
Generator Maintenance	Sites using backup electrical generators will require a minimum yearly maintenance of those units and contracts should be put in place.	Yearly Fee
Generator Fuel	Sites using backup electrical generators will require fuel levels to be monitored and maintained.	
HVAC Servicing	As modern system equipment requires a regulated operating condition, it is critical to maintain air handling systems at sites.	Yearly contract
System Maintenance Fees	Systems maintenance contracts are commonplace with a modern radio network. Fees can include monitoring of alarms and technical support for repairs on a 24 X 7 X 365 need. Contracts are scaled based on the size and complexity of the system.	Yearly contract 4-5% of System Cost with yearly increase
System Updates	As modern systems are very software based, keeping up with changes means anticipating updates. Especially with trunking system as described in Option 3, the County must be aware the manufacturer continues to develop and provide upgrades which will have an ongoing cost. Recommendations are to stay within two versions of the current software offering.	Yearly contract 6-7% of System Cost

16.7 TIMELINE CONSIDERATIONS

As an understanding TNCG provides the following standard processes used by many public safety clients to take the information developed in this report and complete a process to update systems. Some projects move in unique direction, but this can be used to understand the basic time for completing an average project.

Phase II – RFP Development - RFP development as a phase incorporates time spent working with agencies who decide to take the next step in the procurement process and develop a request for vendors to use in the process of quoting them a replacement system. This phase takes some time to get the necessary consensus and a designated group together that works with TNCG & Associates to further identify and drill down on the specific needs of the replacement system. That group then oversees the document assembled by TNCG to its completion. (3-5 Month process)

Phase III – System Procurement Process, Contract Negotiations and Award – Having reached a design that best meets all needs and having put in place the funding mechanisms needed to support the purchase, an RFP release is made. The Procurement phase takes in the time need to provide vendors time to build designs based on the RFP and work through negotiations to a solution that will meet all needs. **(4-6 Month process)**

Phase IV – System Implementation – Final project phase of system implementationdepends on the level of system needs and many tower siting considerations of design. Mostprojects will require some level of developmental work.(18-30 Month process)

16.8 COUNTY SUPPORT

- Evaluate presented options and identify and develop an optimal path for Richland County.
- Evaluate operational changes needing to be addressed and updated.
- Facilitate the financial process for implementation of new system.
- Create a core group of representatives that have a vested interest in the success of a new system that will serve to provide input through the design/purchasing processes.
- Coordinate the implementation of the new communication system and the transition of County agencies with the successful vendor.
- Implement all necessary new practices, project management, and finalize documentation to complete project and assure future success.

17 PLANNING CONCERNS AND RECOMMENDATION

17.1 PLANNING CONCERNS

TNCG identifies the following concerns and considerations to be focused on by leadership during planning activities:

- The current County system implementation has come about as a product of identifying needs and obtaining solutions without a common overall goal in consideration. Reversing this process will be challenging without a complete forklift replacement of the system or a final plan to work backwards from.
- With the County's terrain, design challenges to minimize tower sites and maximize coverage will be difficult. Reaching public safety standards may be difficult without major civil investments.
- With the operation of multiple repeater systems on common frequencies no system limitations are available for devices interfering with each other and possibly causing lost communications. It is difficult to understand and define the possible ramifications of operating this type of system.
- Countywide planning and governance functions of emergency communications equipment and operations needs to be improved to ensure any migration.
- The 911 center's radio communications capabilities systems were provided from a neighboring County (used) and have served a number of years in Richland and are no longer supported by the manufacturer.
- 911 radio dispatch consoles provide key Jail access/control and intercom operations. These system need to be separated to ensure better reliability and vendor support.
 - Richland County subscriber equipment needs to be brought up to a more robust public safety level of standards assuring reliability and timely performance testing.
- With any upgrade, every effort should be made to reduce the complexity for public safety officers and dispatchers to allow the communications to quickly, effectively, and efficiently be delivered.
- Implementation practices of sites not having proper housing, electrical, and grounding infrastructure may be costly in the event of failures.
- Fire ground operational capabilities and reliance should be considered and improved as part of any Countywide design.
- Multi-band radio considerations will add to the purchase price of any new public safety radio approximately \$1000 per unit.

- Paging system improvements need to be considered with enhancements to the voice systems that improve in building service levels greatly.
- At most of the locations visited there was a lack of what is proper grounding designs which should be implemented if a system upgrade occurs. With the advent to newer technology operating at much lower voltage levels, they are much more susceptible to surges in power and atmospheric conditions.
- Project budgets should anticipate civil costs slightly higher for Greenfield sites, or carry a higher percentage contingency.

17.2 TNCG'S RECOMMENDATION

TBD with final version

18 APPENDIX 1 – PUBLIC SAFETY FCC LICENSE SEARCH - RICHLANDCOUNTY

Call Sign	Loc #	Ant#	Frequency	Station Class	Emission	CHAN NAME	
WQLI354	3	1	153.8525	MO	11K2F3E	EMA REPEATER RX	
WQLI354	4	1	153.8525	FX1	11K2F3E	EMA REPEATER RX	
WQLJ354	6	1	153.8525	FB2	11K2F3E	EMA REPEATER RX	
WQLI354	7	1	153.8525	MO	11K2F3E	EMA REPEATER RX	
WQLI354	8	1	153.8525	FX1	11K2F3E	EMA REPEATER RX	
KN EJ 488	5	1	153.8900	MO3	11K2F3E	FUTURE USE	
WBY232	2	1	153.9350	FX1	11K2F3E	COUNTY ROADS REPEATER RX	
WBY232	3	1	153.9350	MO	11K2F3E	COUNTY ROADS REPEATER RX	
WBY232	3	1	153.9350	MO	11K2F3E	COUNTY ROADS REPEATER RX	
WP GQ342	1	1	154.2050	FB2	11K2F3E/20KOF3E	FIRE REPEATER TX	
WP GQ342	2	1	154.2050	FB2	11K2F3E/20KOF3E	FIRE REPEATER TX	
WP GQ342	3	1	154.2050	FB2	11K2F3E/20KOF3E	FIRE REPEATER TX	
WP GQ342	4	1	154.2050	FB2	11K2F3E/20KOF3E	FIRE REPEATER TX	
WP GQ342	5	1	154.2050	FB2	11K2F3E/20KOF3E	FIRE REPEATER TX	
WP GQ342	6	1	154.2050	FB2	11K2F3E/20KOF3E	FIRE REPEATER TX	
WP GQ342	8	1	154.2050	MO	11K2F3E/20KOF3E	FIRE REPEATER TX	
KAF497	1	1	154.7700	FX1	11K2F3E/20K0F3E	LEA REPEATER RX	
KAF497	3	1	154.7700	MO	11K2F3E/20K0F3E	LEA REPEATER RX	
KAF497	2	1	154.8600	FB	11K2F3E/20K0F3E	OPS REPEATER TX	
KAF497	3	1	154.8600	MO	11K2F3E/20K0F3E	OPS REPEATER TX	
KN EJ 488	1	1	154.8600	FB2	11K2F3E	OPS REPEATER TX	
KN EJ 488	2	1	154.8600	FB2	11K2F3E	OPS REPEATER TX	
KN EJ 488	3	1	154.8600	FB2	11K2F3E	OPS REPEATER TX	
KN EJ 488	6	1	154.8600	FB2	11K2F3E	OPS REPEATER TX	
KN EJ488	7	1	154.8600	FB2	11K2F3E	OPS REPEATER TX	
KN EJ488	8	1	154.8600	MO	11K2F3E	OPS REPEATER TX	
KN EJ 488	8	1	154.8600	МО	11K2F3E	OPS REPEATER TX	
KAF497	2	1	155.3100	FB	11K2F3E/20K0F3E	INFORMATION BASE	
KAF497	2	1	155.3700	FB	11K2F3E/20K0F3E	POINT TO POINT	
KAF497	2	1	155.4750	FB	11K2F3E/20K0F3E	VLAW31	
KAF497	3	1	155.4750	MQ	11K2F3E/20K0F3E	VLAW31	
KAF497	2	1	155.7600	FB	11K2F3E/20K0F3E	MAQUOKETA DPW	
KAF497	3	1	155.7600	MO	11K2F3E/20K0F3E	MAQUOKETA DPW	
KAF497	3	1	155.8500	мо	11K2F3E/20K0F3E	FUTURE USE	
KAF497	3	1	155.9100	мо	11K2F3E/20K0F3E	INFORMATION MOBILE	
WQLI354	1	1	156.1725	FB2	11K2F3E	EMA REPEATER TX	
WQLI354	3	1	156.1725	MO	11K2F3E	E MA REPEATER TX	
WQLJ354	5	1	156.1725	FB2	11K2F3E	E MA REPEATER TX	
WQLI354	7	1	156.1725	MO	11K2F3E	EMA REPEATER TX	
WQLI354	8	1	156.1725	FB2	11K2F3E	EMA REPEATER TX	
WQLJ354	2	1	156.1725	FB2	11K2F3E	EMA REPEATER TX	
WBY232	1	1	158.8350	FB2	11K2F3E	COUNTY ROADS REPEATER TX	
 KNEJ488	4	1	159.0300	FX1	11K2F3E	OPS REPEATER RX	
KNEJ488	5	1	159.0300	MO	11K2F3E	OPS REPEATER RX	
KNEJ488	5	1	159.0300	MO	11K2F3E	OPS REPEATER RX	
KNE488	8	1	159.0300	MO	11K2F3E		
 KINEJ488	8	1	159.0300	MU EV1	11K2F3E		
WP GQ342	/ P	1	159.4050	MO	11K2F3E/20K0F3E		
WOMS205	1	1	15/ 2050	FR2	11K2E3E	FIRE REPEATER TX	
 WOMS296	2	1	159.2050	MO	11K2F3F		
 WOMS296	3	1	154 2050	FB2	11K2F3E	FIRE REPEATER TX	
WOMS296	4	1	159.4650	MO	11K2F3E	FIRE REPEATER RX	
WPEP624	. 1	1	159.4650	FB2	11K2F3E	FIRE REPEATER RX	
WP EP 624	1	1	159.4650	FB	11K2F3E	FIRE REPEATER RX	
WP EP 624	2	1	159.4650	FB	11K2F3E	FIRE REPEATER RX	
WP EP 624	3	1	159.4650	MO	11K2F3E	FIRE REPEATER RX	



19 APPENDIX 2 – MUTUAL AID CHANNELS

Organization	Neighbor	Agency	Radio Band	Frequency Information	Notes
organization	itelgilboi	ABeney	Ruuro Buriu	requercy mornation	Notes
Jackson County	Dubuque County IA	Sheriff	800	EDACS Trunking (RACOM)	Moving to 800 MHz P25
		Fire	800	EDACS Trunking (RACOM)	Moving to 800 MHz P25
Jackson County	Jones County IA	Sheriff	VHF	151.295 (107.2)	
		Fire	VHF	154.385 (146.2)	
Jackson County	Clinton County IA	Law	VHF	154.965 (146.2)	
		Fire	VHF	154.235	
		ch		455 670	
Jackson County	Carroll County IL	Sheriff	VHF	155.670	
		Fire	VHF	151.3925	
Jackson County	la Daviass County II	Chariff	VUE	150 310	
Jackson County	Jo Daviess County IL	Sherin	VHF	159.210	
		File	VIIF	155.820	
Jackson County	Grant County WI	Sheriff	VHE	155 865	
succon county	chant county th	Fire	VHE	155.745	
		The second		2001710	
Jackson County	State of Iowa	State Patrol	ISICS		
Jackson County	State of Illinois	State Patrol	800	Starcom	



20 APPENDIX 3 – DELIVERED AUDIO QUALITY

DAQ Delivered Audio Quality	Subjective Performance Description
1	Unusable; speech present but unreadable.
2	Understandable with considerable effort. Frequent repetition due to noise/distortion.
3	Speech understandable with slight effort. Occasional repetition due to noise/distortion.
3.4	Speech understandable with repetition only rarely required. Some noise/distortion.
4	Speech easily understood. Occasional noise/distortion.
4.5	Speech easily understood. Infrequent noise/distortion.
5	Speech easily understood.

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21 APPENDIX 4 – TOWER SITES MAP



22 APPENDIX 5 – TOWER SITES LIST

44/2021 ASR Registration Search Results							
AS⊮ R€	Registration S	Search n Search	n Result	s			
Dis	played Result	ts					
_						PA = Pending A	oplication(s)
Sp: Stri	ucture State =	WISCONSIN					
Str	ucture County	= RICHLAND					
							Height Above
	Registration Number	Status	Fille Number	Owner Name	Latitude/Longitude	Structure City/State	Ground (AGL)
1	1000186	Constructed	A0925062	UNITED STATES CELLULAR CORPORATION	43-20-15.0N 090-22-41.0W	RICHLAND CENTER, WI	97.5
2	1003387	Constructed	A1050338	WISCONSIN RSA NO, 8 LIMITED PARTNERSHIP	43-21-35.6N 090-21-32.2W	RICHLAND CENTER, WI	130.7
3	1034924	Constructed	A1182798	WISCONSIN, STATE OF	43-29-54.0N 090-32-25.0W	ASHRIDGE, WI	98,1
4	1035400	Granted	A1186469	Wisconsin Power and Light Company	43-16-07-0N 090-25-02.5W	RICHLAND CENTER, WI	79,2
5	1050690	Constructed	A0937540	UNITED STATES CELLULAR CORPORATION	43-32-08-1N 090-27-55.0W	YUBA, WI	47.2
5	1054198	Granted	A0063721	RICHLAND CENTER FELLOWSHIP	43-18-51.0N 090-23-03.0W	RICHLAND CENTER, WI	152.4
7	1243602	Constructed	A1060321	WISCONSIN RSA NO, 8 LIMITED PARTNERSHIP	43-18-17.8N 090-23-16.7W	Richland Center, WI	49,9
8	1244050	Cancelled	A0586242	Fruit Broadcasting, LLC	43-20-13.1N 090-22-44.3W	Richland Center, WI	66,4
9	1255589	Constructed	A0937535	UNITED STATES CELLULAR CORPORATION	43-20-26.6N 090-32-20.5W	MUSCODA, WI	94,4
10	1256425	Constructed	A0972471	UNITED STATES CELLULAR CORPORATION	43-31-12.4N 090-11-39.4W	CAZENOVIA, WI	94.4
11	1257097	Constructed	A0626849	FRUIT BROADCASTING, LLC	43-18-55.4N 090-25-35.0W	RICHLAND CENTER, WI	106.4
12	1265016	Constructed	A0617990	Village of Lone Rock	43-10-50.3N 090-11-58.2W	Lone Rock, WI	50,9
13	1298241	Cancelled	A1133256	SBA Towers VI, LLC	43 21 07 9N 090 25 35 5W	Richland Center, WI	91,4
14	1299583	Constructed	A1054369	Cloud 1	43-31-25.9N 090-24-04.2W	Hillsboro, WI	92,9
15	1300397	Constructed	A1062671	Cloud 1	43-19-28.6N 090-29-55.7W	Richland Center, WI	92,9
16	1302404	Granted	A1104980	M3 Hilbert Towers, LLC	43 19 52 9N 090 21 32 2W	Richland Center, WI	77,7

6/4/20	21			ASR Registration Sea	rch Results		
17	1302650	Granted	A1104983	M3 Hilbert Towers, LLC	43-22-49-0N 090-36-43-7W	Richland Center, WI	74,6
18	1302652	Constructed	A1104984	M3 Hilbert Towers, LLC	43-21-29-9N 090-16-32.6W	Ithaca, WI	92.9
19	1302968	Constructed	A1104986	M3 Hilbert Towers, LLC	43-25-17-9N 090-37-36-4W	Richland Center, WI	77,7
20	1303491	Constructed	A1136179	M3 Hilbert Towers, LLC	43-15-50 9N 090-19-02.6W	Richland Center, WI	54,9
21	1308125	Constructed	A1166352	VBHV, LLC	43-11-17-6N 090-12-35.9W	Lone Rock, WI	47,2
22	1310721	Constructed	A1151702	Cloud 1	43-32-33-5N 090-31-46-3W	LaFarge, WI	93,0
23	1310722	Constructed	A1174292	M3 Hilbert Towers, LLC	43-13-22.6N 090-23-47.5W	Muscoda, WI	93,0
24	1310935	Constructed	A1167410	M3 Hilbert Towers, LLC	43-29-10-4N 090-26-28.9W	Richland Center, WI	93.0
25	1310937	Constructed	A1167418	M3 Hilbert Towers, LLC	43 28 35 9N 090 32 55 0W	Viola, WI	93.0
26	1311638	Constructed	A1180364	M3 Hilbert Towers, LLC	43-24-39.8N 090-26-12.3W	Richland Center, WI	93.0
27	1311751	Constructed	A1167404	M3 Hilbert Towers, LLC	43-31-30.0N 090-12-32.2W	Cazenovia, WI	93.0
28	1311997	Constructed	A1174307	M3 Hilbert Towers, LLC	43-26-33.0N 090-22-01.0W	Richland Center, WI	93.0
29	1312798	Constructed	A1174309	M3 Hilbert Towers, LLC	43-19-06-0N 090-35-30.7W	Blue River, WI	71.3
30	1314193	Constructed	A1180414	M3 Hilbert Towers, LLC	43-13-16-1N 090-35-55.6W	Blue River, WI	77,4
31	1315052	Constructed	A1180379	M3 Hilbert Towers, LLC	43-25-22.9N 090-16-16.5W	Cazenovia, WI	92.7

CLOSE WINDOW)

23 APPENDIX 6 – AGENCY BOUNDARY MAPS





24 APPENDIX 7 – FIRSTNET UPDATE
25 APPENDIX 8 – COUNTY MAP



Richland County Finance and Personnel Committee

Agenda Item Cover

Department	Ambulance	Presented By:	Darin Gudgeon
Date of Meeting:	6 July 2021	Action Needed:	Vote
Disclosure:	Open Session	Authority:	Committee Structure (K)
Date submitted:	30 June 2021	Referred by:	Joint Ambulance Committee

Agenda Item Name: Ambulance Account – transfer of funds

Recommendation and/or action language:

Motion to approve a resolution for the County Board to transfer \$20,000 out of the ambulances operating budget and into the new ambulance outlay account.

Background: (preferred one page or less with focus on options and decision points)

The Joint Ambulance Committee (JAC) approved a motion to transfer \$20,000 out of Fund 51, the non-lapsing ambulance operations account, and put into Fund 16 which is the new ambulance outlay account. This transfer is an annual practice of the committee in transferring from operations to ambulance outlay with intentions to build up funds for future ambulance purchase. Both funds are non-lapsing and in the control of the department/committee.

The Committee's authority for this transaction is defined in the committee structure document:

K. Make fund transfers between budget lines within the budgets of individual departments or committees in the annual County budget.

Attachments and References:

Financial Review:

(please check one)

Х	In adopted budget	Fund Number	51 to 16
	Apportionment needed	Requested Fund Number	
	Other funding Source		
	No financial impact		

(summary of current and future impacts)

Approval: Review	v:
Darin Gudgeon	
Department Head Admin	istrator, or Elected Office (if applicable)

Agenda Item Cover

Department	Administration	Presented By:	Administrator
Date of Meeting:	July 6 th 2021	Action Needed:	Vote
Disclosure:	Open Session	Authority:	Structure C +E
Date submitted:	June 30 th , 2021	Referred by:	Rules and Resolutions
Action needed by no later than (date)	N/A	Resolution	N/A, <u>needed</u> , prepared, reviewed

Agenda Item Name: Employee meals per diem rate

Recommendation and/or action language:

Motion to ... 2) Recommend resolution to the Richland County board to ammned the Richland County Employee handbook to increase in reimbursement for meals from \$20/day to \$25/day and language changes (as presented / as amended).

Background: (preferred one page or less with focus on options and decision points)

The following language changes reflect action taken by the Rules and Resolutions committee to change Rule #16 regarding meal reimbursement for supervisors. Below that you will find recommended changes to the Employee Handbook.

Current Languages with Proposed Amendments:

Rule 16 — Supervisors shall follow the following expense reimbursement policy for supervisors while engaged in County business: ...(b) Policy as to reimbursement for meals:

1. The actual expenses for meals shall be reimbursed in an amount not to exceed $\frac{20.00 \times 25.00}{2022}$ in any one day (effective January 1, $\frac{2005 \times 2022}{2022}$).

2. Alcoholic beverage is not a reimbursable expense.

23. The above limitation shall not include applicable sales taxes which shall be reimbursed, and gratuities shall be reimbursed up to a maximum of 15 percent of the amount of the bill.

<u>34</u>. Receipts shall be required in all cases. Detailed, itemized receipts shall be required in all cases. (Lodging invoices indicating "room service" charges will not suffice for reimbursement.)

4<u>5</u>. <u>Reimbursement of meals is only warranted when traveling out of the county on county business</u>. All supervisors' meal reimbursements must be approved by the <u>Audit Committee County Clerk</u>.

Richland County Employee Handbook (Pg. 26)

- 2. Meals: Policy as to reimbursement for meals:
- Actual expenses for meals shall be reimbursed in amounts not to exceed \$20.00 \$25.00/day.
- Alcoholic beverage is not a reimbursable expense.

• The above limitations shall not include applicable sales tax which shall be reimbursed, and gratuities which shall be reimbursed up to a maximum of 15% of the amount of the bill.

• Detailed, itemized receipts shall be required in all cases. (Lodging invoices indicating "room service" charges will not suffice.)

Agenda Item Cover

• Reimbursement of meals is only warranted when traveling out of the county on county business. All employees' meal reimbursements must be approved by the department head.

Administrator's notes:

The following proposed changes are made with desire for consistency and consideration for:

Increasing expenditure — this is a 25% or \$5.00 per day increase.

Leniency — the language allows for discretion within a day and does not stipulate amounts per meal. Considerations of instances of 1) does lodging provide breakfast, and 2) does the venue/registration provide lunch, 3) partial day events, are considered in this amount. Additional weekly leniency of grocery purchasing in bulk on Monday to cover a Monday-Friday event has been considered, but leads to questions on "what if person ends training short?" and "why can't they make daily trips?" Payment of a \$125.00 restaurant bill on Monday may also raise questions on intent of policy. I recommend we leave the leniency set at a daily amount.

Auditing concerns — we still require itemized receipts per day linking expenditures to event.

Approval — Supervisor approval is transitioned from Auditing Committee to the Clerk, as payments or often released prior to audit committee. Employee approval is specified to the department head.

Attachments and References:

None	

Financial Review:

((plea	ise check one)		
ĺ	Х	In adopted budget	Fund Number	Multiple Budgets Impacted effective 2022
ĺ		Apportionment needed	Requested Fund Number	
ĺ		Other funding Source		
		No financial impact		

(summary of current and future impacts)

Actual Expenses reimbursed through budget object .5335 Meals:

2021 Expenditures on object .5335 = \$8,459.42	x1.25	=\$10,574.28
2020 Expenditures on object .5335 = \$5,603.59 (COVID year)	x1.25	=\$7,004.49

Increasing the amount from \$20.00 to \$25.00 will add an <u>estimated cost impact of \$2,114 annually</u>, pending post-pandemic travel and training.

Approval:	Review:
	Clinton Langreck
Department Head	Administrator, or Elected Office (if applicable)

Richland County Finance and Personnel Committee

Agenda Item Cover

Department	Pine Valley	Presented By:	Chris Glasbrenner
Date of Meeting:	July 6, 2021	Action Needed:	Vote
Disclosure:	Open	Authority:	
Date submitted:	June 24, 2021	Referred by:	Pine Valley Trustees

Agenda Item Name: Sign on Bonus

Recommendation and/or action language: to approve sending a resolution to the County Board asking for an increase to and expansion of Pine Valley's sign-on Bonus program; (increasing the bonus amount for the new employee from \$500 to \$1,000, and <u>increasing</u> the bonus amount for the current employee who referred the new employee from \$100 to \$250, and <u>expanding</u> the program from just nursing department positions to now include activity aide, housekeeper, laundry worker, personal care worker, food service II, lead cook, and maintenance worker).

Background: Resolution 15-99 created the current sign-on bonus program. A general lack of applicants for all positions, along with wages and bonuses offered by competition, are the reasons behind this request.

Attachments and References:

see Resolution 15-99 for program details	

Financial Review: see below

[In adopted budget Fund Number
	Apportionment/needed Requested Fund Number
ſ	No financial impact

Current program cost \$5,050 in 2020. Increase to and expansion of program could add \$10,000 to \$20,000 in new annual costs. Increase costs to be funded through operations.

Approval:

Review:

Rislore 07

Department Head

Administrator, or Elected Office (if applicable)

Resolution No. 15-99 Approving A Sign-On Bonus Relating To Newly-Hired Certified Nursing Assistants And Nurses At Pine Valley Healthcare And Rehabilitation Center was read by County Clerk Vlasak. Motion by Sebranek, second by Crofton that Resolution No. 15-99 be adopted. Chris Glasbrenner, Pine Valley Human Resources Director, explained the bonus proposal. Motion carried and resolution declared adopted.

RESOLUTION NO. 15-99 21-___

A Resolution Approving A Sign-On Bonus Relating To Newly-Hired Certified Nursing Assistants And Nurses, and activity aides, housekeepers, laundry workers, personal care workers, food service II staff, lead cook, and maintenance workers At Pine Valley Healthcare And Rehabilitation Center Community Village.

WHEREAS the Board of Trustees of Pine Valley Healthcare and Rehabilitation Center Community Village and the Administrator at Pine Valley, Ms. Kathy Cianci Tom Rislow, have recommended a program designed to encourage hiring of new certified nursing assistants and nurses, and activity aides, housekeepers, laundry workers, personal care workers, food service II staff, lead cook, and maintenance workers at Pine Valley by offering a sign-on bonus, and

WHEREAS the Finance and Personnel Committee has carefully considered this proposal and is now presenting this Resolution to the County Board for its consideration.

NOW THEREFORE, BE IT RESOLVED by the Richland County Board of Supervisors that approval is hereby granted for the following sign-on bonus relating to hiring new certified nursing assistants and nurses, and activity aides, housekeepers, laundry workers, personal care workers, food service II staff, lead cook, and maintenance workers at Pine Valley:

1. The certified nursing assistant or nurse, or activity aide, housekeeper, laundry worker, personal care worker, food service II staff person, lead cook, or maintenance worker is hired for a call-in, part-time or full-time position;

2. Upon applying for employment, the certified nursing assistant or nurse, or activity aide, housekeeper, laundry worker, personal care worker, food service II staff person, lead cook, or maintenance worker signs a statement that they

were recruited by a Pine Valley employee, the recruiting employee must also sign the statement; 3. The newly-hired certified nursing assistant or nurse, or activity aide, housekeeper, laundry worker, personal care worker, food service II staff person, lead cook, or maintenance worker remains employed for at least 90 days and works

a minimum of at least 7 shifts after completion of their orientation;

4. After the newly-employed certified nursing assistant or nurse, or activity aide, housekeeper, laundry worker, personal care worker, food service II staff person, lead cook, or maintenance worker has worked for 90 days, the referring

employee, if still employed at Pine Valley would receive a \$100.00 \$250 bonus and the new employee would receive

a bonus of \$250.00 **\$500**;

5. A second payment of \$250.00 \$500 would be paid to the new employee after completion of 1 year of employment at Pine Valley, except that an on-call employee must work at least 24 shifts after completing orientation, and

BE IT FURTHER RESOLVED that the Administrator of Pine Valley is authorized to temporarily suspend this program or permanently terminate it, at the Administrator's discretion, and

BE IT FURTHER RESOLVED that this Resolution shall be effective immediately upon its passage and publication.

RESOLUTION OFFERED BY THE FINANCE AND PERSONNEL COMMITTEE

FOR AGAINST

Agenda Item Cover

Department	Administration	Presented By:	Payroll and Benefits Spec.		
Date of Meeting:	July 1 st , 2021	Action Needed:	Vote		
Disclosure:	Open Session	Authority:	By employee handbook		
Date submitted:	July 6 th , 2021	Referred by:			
Action needed by no later than (date)	N/A	Resolution	N/A, prepared, reviewed		

Agenda Item Name: Vacation accrual discrepancy – handbook v. Resolution 19-36

Recommendation and/or action language:

1) Motion to ... recommend amendment to Resolution 19-36, correcting typo of vacation accrual from "3 work weeks at the end of 5 years" to "3 work weeks at the end of 6 years" as indicated in the Employee Handbook, and as has been the historic practice.

Background: (preferred one page or less with focus on options and decision points)

A discrepancy in our vacation accrual between the County handbook and a resolution was identified. Per Resolution 19-36, which was intended to extend the vacation deadline from 12 months to 18 months, it states that employees are to accrue "3 work weeks at the end of 5 years". The County handbook states employees are to accrue "3 work weeks at the end of 6 years."

I've been administering vacation at the end of 6 years as that is how it has been for years and years. It appears this was a typo that was not caught in Resolution 19-36. If there were intensions to change from 6 to 5 years, the intentions were not made aware and changes were not incorporated into the Employee Handbook.

If it's not a typo, and intentions are to grant 3 weeks at 5 weeks, I will need to determine the employees this affected since April 2019 and award them 1 extra week of vacation and the Board will need to decide if we will give these employees additional time to use up this one week that wasn't correctly awarded to them or if it has to be used up within 18 months from their last anniversary date

Attachments and References:

Review: c one) bied budget	Fund Number	
ted budget	Fund Number	
oted budget	Fund Number	
ionmont needed	I unu Tunnoel	
ionment needed	Requested Fund Number	
unding Source		•
ancial impact	•	
current and future in	npacts)	
cision.		
		Review:
"		Clinton Langreck
Head		Administrator, or Elected Office (if applicable)
	ncial impact current and future in cision. "	inding source ncial impact current and future impacts) cision. " Head

Agenda Item Cover

RESOLUTION NO. 19 - 36

A Resolution Amending The Handbook Of Personnel Policies and Work Rules Relating To When Employees Must Take Vacations.

WHEREAS it is currently provided in the Handbook of Personnel Policies and Work Rules that employees must take vacation within 18 months of the employee's anniversary date or the vacation is forfeited and it has been suggested that authority be given to the Finance and Personnel Committee to extend the deadline for employees to take vacation beyond 18 months when the employee has not been able to take vacation by the deadline due to unforeseen circumstances, so that extensions of vacation deadlines do not have to be taken up by

WHEREAS the Finance and Personnel Committee has carefully considered this proposal and is now presenting this Resolution to the County Board for its consideration.

NOW THEREFORE BE IT RESOLVED by the Richland County Board of Supervisors that the following underlined language is hereby added to the first paragraph of subsection 12 entitled "Vacation" under the heading "Compensation and Fringe Benefits of the Handbook of Personnel Policies and Work Rules":

> 12. Vacation: For full-time employees, vacations are granted on their anniversary date. Vacation is as follows: 1 work week after 1 year of employment; 2 work weeks at the end of 2 years; 3 work weeks at the end of 5 years; 4 work weeks at the end of 12 years; 5 work weeks at the end of 23 years. Vacation must be used within 18 months following the employee's anniversary date. The Finance and Personnel Committee is authorized to extend this deadline if the employee has been unable to take their accrued vacation within 18 months due to unforeseen circumstances. Vacation time not taken in accordance with this paragraph is forfeited. While vacations may be taken at any time, County employees are required to notify their Department Head of their expected vacation dates as soon as they are known to the employee. All Department Heads shall have the authority to disapprove a County's employee's proposed dates of vacation only if the proposed dates will disrupt the operation of that Department. If duplicate requested dates arise, the employee whose request was made first will be favored. Vacation days may be used singly or all at once. Regular, part-time employees who work at least half-time accrue vacation at onehalf the rate for full-time employees. All vacation time must be reported biweekly to the County Clerk's Office, and

RE IT FURTHER RESOLVED that this Resolution shall be affective and

publication.	tuns Resolution shall be effective immediately upon its passage
VOTE ON FOREGOING RESOLUTION	RESOLUTION OFFERED BY THE FINANCE AND PERSONNEL COMMITTEE
RESOLUTION <u>Adopted</u>	FOR AGAINST
COUNTY CLERK	Junde Lanter V
DATED <u>April 16, 2019</u>	Marty Steller X
	dan Denand X
	Jinal Les
	Khan Muj - hop V
	V · /

Agenda Item Cover

Department	Administration	Presented By:	Administrator
Date of Meeting:	July 6 th , 2021	Action Needed:	Review for future action
Disclosure:	Open Session	Authority:	Structure E and L
Date submitted:	June 30 th , 2021	Referred by:	
Action needed by no later than (date)	N/A	Resolution	Future need

Agenda Item Name: Classification, Compensation and Staff Authorization

Recommendation and/or action language:

Motion to ... approve amendments to the Authorization Table of the Classification, Compensation and Staff Authorization Table for existing Health and Human Services Positions identified, and affirm recommendation to the County Board for resolution.

Background: (preferred one page or less with focus on options and decision points)

The Finance and Personnel Committee took action to approve this policy in its previous meeting. The Administrator overlooked a report from the Health and Human Services director indicated needed changes to the following positions in order to reflect current authorization:

1. APS/Crisis Professional – Grade H: This is a new position that was created by County Board Resolution 21-30 on February 17, 2021. The table already contained this position title in error before it was approved by the County Board. The number of Regular Full-Time staff should be 1 (not 2).

2. Child & Youth Services Manager – Grade L: This position was removed from the table, but should NOT have been eliminated. This position remains in place.

3. Child & Youth Services Supervisor – Grade K: This is the new position that was created by County Board Resolution 21-29 on February 17, 2021.

4. Child & Youth Case Manager – Grade H: One of the six positions was eliminated by County Board Resolution 21-29 on February 17, 2021 when the above supervisor position was created.

Agenda Item Cover

	STAFF AUTHORIZATION TABLE										
							PERSONNEL - CATEGORY				(
DEPT CODE	DEPARTMENT	DIVISION OR UNIT	POSITION TITLE	PAY GRADE	FLSA STATUS	WEEKLY CAPACITY	REGULAR FULL-TIME	REGULAR Part-time	LIMITED TERM	RESERVE / CALL-IN / SEASONAL	CONTRACT / Lease
5563			Driver/Escort Driver	A	Hourly		0.00	3.00	0.00	0.00	0.00
5477	Behavioral He	alth Services	Behavioral Health Services Manager	N	Exempt	40	1.00	0.00	0.00	0.00	0.00
5472			CCS Supervisor	M	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Quality Coordinator (LONGTERM VACANCY)		Exempt	40	1.00	0.00	0.00	0.00	0.00
5457			CLTS & BT3 Supervisor	L	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Early Intervention Special Educator (LONGTERM VACANCY)		Exempt	40	1.00	0.00	0.00	0.00	0.00
			Speech & Language Pathologist (LONGTERM VACANCY)		Exempt	28	0.00	1.00	0.00	0.00	0.00
			Occupational Therapist (LONGTERM VACANCY)		Exempt	28	0.00	1.00	0.00	0.00	0.00
5477			Business Systems Analyst	Н	Exempt	40	1.00	0.00	0.00	0.00	0.00
5472			Mental Health Therapist	ĸ	Exempt	40	5.00	0.00	0.00	0.00	0.00
5478			Substance Abuse Counselor	1 I I I I I I I I I I I I I I I I I I I	Exempt	40	1.00	0.00	0.00	0.00	0.00
5408			Treatment Court Coordinator	1 I	Exempt	40	1.00	0.00	0.00	0.00	0.00
5532			Adult Protective Services Worker	Н	Exempt	40	1.00	0.00	0.00	0.00	0.00
5532			APS/Crisis Professional	н	Exempt	40	1.00	0.00	0.00	0.00	0.00
5459			CLTS & BT3 Case Manager	н	Exempt	40	1.00	0.00	0.00	0.00	0.00
5401			Psychiatric RN	к	Exempt	40	1.00	0.00	0.00	0.00	0.00
5472			Psychiatric RN	ĸ	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Psychiatric RN (SWWDB Leased Position)	\$23.93/hr	Exempt	20	0.00	0.00	0.00	0.00	1.00
			Crisis Case Worker (SWWDB Leased Position)	\$24.97/hr	Exempt	40	0.00	0.00	0.00	0.00	1.00
			Service Facilitator (SWWDB Leased Position)	\$19.77/hr	Exempt	40	0.00	0.00	0.00	0.00	3.00
			Rehabilitation Worker (SWWDB Leased								
			Position)	\$20.05/hr	Hourly	10	0.00	0.00	0.00	0.00	1.00
5502	Child & Ye	outh Services	Child & Youth Services Supervisor	K	Exempt	40	1.00	0.00	0.00	0.00	0.00
5502			Child and Youth Services Manager	L	Exempt	40	1.00	0.00	0.00	0.00	0.00
5502			Child & Youth Services Case Manager	Н	Exempt	40	5.00	0.00	0.00	0.00	0.00
5502			Youth Aide Worker	G	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Family Preservation Worker (Vacant SWWDB								
			Leased Position)		Hourly	28	0.00	0.00	0.00	0.00	1.00
5503	Econ	omic Support	Economic Support Manager	ĸ	Exempt	40	1.00	0.00	0.00	0.00	0.00
5503			Economic Support Lead Worker	Н	Exempt	40	1.00	0.00	0.00	0.00	0.00
5503			Economic Support Specialist	F	Hourly	40	13.00	0.00	0.00	0.00	0.00
5401		Public Health	Public Health Manager/Local Health Officer	N	Exempt	40	1.00	0.00	0.00	0.00	0.00
5401			Public Health Nurse (1-LONGTERM VACANCY)	к	Exempt	40	1.00	0.00	0.00	0.00	0.00
5401			Public Health Clinic Nurse	ĸ	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Health & Wellness Coordinator (LONGTERM		Succept	10		0.00			
			VACANCY)	н	Exempt	40	1.00	0.00	0.00	0.00	0.00

Attachments and References:

Financial Review:

(please check one)

	In adopted budget	Fund Number	
	Apportionment needed	Requested Fund Number	
	Other funding Source		
Х	No financial impact		

(summary of current and future impacts)

Policy is intended to include current practice, wages and authorization. No additional cost impacts intended with adoption of the policy.

Approval:

Review:

Clinton Langreck

Department Head

Administrator, or Elected Office (if applicable)

RICHLAND COUNTY, WI



-DRAFT- Policy on Personnel Classification, Compensation and Staff Authorization

Effective: ____January ____ Revised: _____

Policy Cover				
Title:	Effective Date: 2021			
Policy on Personnel Classification, Compensation and Staff Authorization	Adoption/Revision Date: 2021			
Custodian:	Approving Body:			
County Administrator	Richland County Finance and Personnel			
	Committee			

1. Authority

- a. Wis. Stat. 59.02 (Powers, how exercised; quorum);
- b. Wis. Stat. 59.03 9 (Home rule);
- c. Wis. Stat. 59.51 (Board Powers);
- d. Wis. Stat. 59.18 (County Administrator); and
- e. Wis. Stat 59.22(2)(c) (Board Powers to establish the number of employees)

2. Reference:

- a. Adopting Resolution/Ordinance/Motion: Resolution No: ____
- b. Authority of Management, Roles of Members and Chairs of Committees, Boards and Commissions: Resolution 20-93
- c. Richland County Employee Handbook
- d. Res 18-10 Adopting a New Pay Plan Wage Scale
- e. Res 18-61 Wage Scale amendment
- f. Res 18-97 Wage Grade Increased
- g. Res 19-89 Amending the County's pay plan wage schedule
- h. Res 19-126 Amending Res 19-89
- i. Ordinance 82-3 Sheriff's Department Ordinance
- j. Ordinance 89-7 Sheriff Department Ordinance

3. Purpose:

The Policy on Personnel Classification, Compensation and Authorization:

- a. establishes uniform classification practices throughout the organization;
- b. establishes compensation practices that are competitive with relevant markets;
- c. establishes an authorization table that identifies the allocation of the county workforce; and
- d. delegates authority and defines procedures to committees and administration.

4. Scope

a. Applies to all Richland County Employees with exceptions of elected, seasonal, limited term, union members under a collective bargaining agreement when in conflict with the agreement, or those positions not otherwise captured in the authorization table.

5. Policy Overview

- a. Authority of this policy is vested in the Richland County Board of Supervisors with specified authorities granted to the Finance and Personnel Committee.
- b. Administrative procedures regarding classification, compensations and the staff authorization are delegated to the County Administrator.

6. Policy Performance Goals:

- a. This policy is established to support the following recruitment and retention goals with quantifiable performance indicators:
 - i. At the organizational level, the average tenure for a regular Richland County, employees should not fall below the national average for public employees as reported annually by the Bureau of Labor Statistics.
 - ii. At the department level, no department should experience more than 25% turn over in a year period, with consideration given to unreasonable circumstances involving smaller departments with limited staff.
 - iii. At the position level, no vacant regular full-time or vacant part-time regular position, should go 60 days without finding a candidate that meets minimum qualifications.
- b. This policy is established to support the following authorization goals with quantifiable performance indicators:
 - i. All employee authorization changes requiring amendments to this policy will be implemented in accordance with this policy, or at the authorization of the County Board.

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SECTION 1: COMPENSATION PHILOSOPHY:

The Richland County Board of Supervisors intends to compensate the employees of Richland County through competitive wages that recognizes required (and acquired) knowledge, skills, and abilities; and awards longevity within the county through paid benefit time off. The compensation structure should give incentive for both professional developments in the given position, and the desire to pursue advancements in grade, authority and responsibility within the county. Compensation should reflect relevant markets in which the County can reasonably compete. Compensation should promote a well-qualified and diverse workforce that represents both the experience of longevity and the innovativeness of influx. It is understood that situations may occur where subordinates, or positions of lower grades, may be compensated at higher rates than supervisor(s), or employees at higher grades; however, these situations should be rare. It is also understood that market demands may fluctuate during recruitment efforts and deviations impacting one employee does not set precedent for other employees. Compensation is provided with an understanding that it is the responsibility of Richland County administration and management to: (1) promote a productive work environment and job satisfaction by fostering a motivational culture of autonomy, mastery and purpose; (2) ensure continuity during employee turnover; and (3) demonstrate fiscal responsibility.

SECTION 2: COMPENSATION PRINCIPLES

- A. Support the performance goals of this policy, the Richland County Mission and strategic initiatives;
- B. Compensation will comply with federal code, state statute and county policy; and
- C. Richland County will utilize consistent practice, procedures, policies, and templates with limited exceptions that may arise from operational needs.
- D. Richland County will not discriminate in classification or compensation based on race, color, gender, religion, creed, age, disability, national origin, sexual orientation, or any other basis prohibited by state or federal law.
- E. Compensation should be transparent and visible upon request of the public and needs of auditing.
- F. This policy does not constitute a contract of employment. This policy can be changed for any reason, at any time, and without warning by the County Board or designated authority thereof. All employees not specifically covered by a collective bargaining agreement, elected, or appointed by statute are considered "at-will."

SECTION 3: POLICY DEFINITIONS

For purposes of this policy the following definitions will apply:

- A. *Emergency* a serious and unexpected situation requiring immediate action to avoid a dangerous or unreasonable liability to the organization."
- B. *Wage Modifier*—any additional pay added to an employee's hourly rate beyond step of the wage schedule. Such as weekend or night differential, etc.
- C. *Step Increase* a wage grade step increase is a lateral progression, move or adjustment along the assigned wage grade.

SECTION 4: WAGE SCHEDULES

The following section describes the structure, purpose and progression of the Richland County Wage Schedules (Appendix E).

A. PAY GRADE:

- 1. County positions are assigned to pay grades with County Board approval, through the processes defined in this policy.
- 2. Reclassification of a position to a different pay grade is described in Section 7 of this policy.
- 3. Each pay grade has a "step range" approved by the County Board
- 4. Individual pay grade ranges may be adjusted by the County Board at any time, and at their discretion. Reasons that may arise to warrant adjustments include (but are not limited to) market changes, operational needs, recruiting and retention trends, or inabilities to meet the goals, philosophy or principles of this policy.
- 5. Additional wage modifiers may apply to individuals within the grade based on County Board approval, or approved department work rules.

B. SCHEDULE PLACEMENT AND PROGRESSION (Res No. 19-89)

General Government:

- 1. Employees with two or more years of employment as of the Effective Date will be placed at step 4 (is currently step 3)
- 2. Employees whose wages were above step 3 prior to the Effective Date will be

placed at the next step that provides an increase; except for those already at the top step

- 3. Employees with less than two years of continuous employment as of the Effective Date, and new hires will be placed at step 2 (is currently step 1)
- 4. After an employee passes probation, the employee will be placed at step 3 (is currently step 2)
- 5. After two years from the date of hire, the employee will be placed at step 4 (is currently step 3)

Pine Valley:

- 6. Employees with two or more years of employment as of the Effective Date will be placed at step 5 (is currently step 4)
- 7. Employees whose wages were above step 4 prior to the Effective Date will be placed at the next step that provides an increase; except for those already at the top step
- 8. Employees with less than two years of continuous employment as of the Effective Date, and new hires will be placed at step 3 (is currently step 2)
- 9. After an employee passes probation, the employee will be placed at step 4 (is currently step 3)
- 10. After two years from the date of hire, the employee will be placed at step 5 (is currently step 4)

General Provisions:

- 11. County department heads, beginning on the Effective Date, may authorize a new hire to start one to two-steps above the new hire step, based on qualifications and experience. The Department must be able to absorb the increased cost in its budget. Such new hires would move up a step upon successful completion of their probationary period and at other designated intervals, unless they are already at the highest step for that position (step 4 for general government; step 5 for Pine Valley)
- 12. County department heads may authorize a one-time placement adjustment (not to exceed step 4 for General Government or step 5 for Pine Valley) for current employees who the department head deems their experience and value to the department warrants the increase.
- 13. The Finance and Personnel Committee is authorized to retain the services of Carlson Dettmann Consulting, LLC, during 2020, to update the county's

composition structures (steps) to reflect current market — update to be completed by April 30, 2020.

14. "The Finance and Personnel Committee is authorized to have the County's compensation structures (steps) updated annually to reflect current market. The Finance and Personnel Committee is also authorized to permit further step progressions beginning in 2021 up to and including the use of all steps in preparations of annual budgets as the Committee and County administration deem feasible"

SECTION 5: SUPPLEMENTAL DEPARTMENT WORK RULES

Federal Regulations, Wisconsin State Statutes and Finance and Personnel Committee approved departmental work rules may allow for pay modifiers and deviation from the Richland County Compensation Policy. Such modifiers and deviations will be presented to the Finance and Personnel Committee by the departments for periodic review.

Departments with supplemental pay schedules and policies include the following appendices:

AA. Ambulance Services / Emergency Management (reserved) BB. Child Support (reserved) CC. Circuit Court (reserved) DD. Coroner (reserved) EE. District Attorney's Office (reserved) FF. Extension Office (reserved) GG. Fair and Recycling (reserved) HH. Health and Human Services (reserved) II. Highway (reserved) II. Land Conservation (reserved) KK. MIS (reserved) LL. Pine Valley Community Services MM. Register of Deeds (reserved) NN. Register in Probate (reserved) 00. Sheriff's Office (including reference to WPPA Agreement) PP. Symon's Recreation Complex (reserved) QQ. Treasurer's Office (reserved) RR. UW Food Services (reserved) SS. Veteran's Services (reserved) TT. Zoning and Sanitation (reserved) UU. Misc. (reserved)

SECTION 6: CLASSIFICATION AND POSITION DESCRIPTIONS

- A. Classification: A positions classification is defined by the following components:
 - 1. **Position Title** As defined by state statute and/or the county

organizational tables, should align with comparable, standardized titles by the Bureau of Labor Statistics when applicable

- 2. **Pay Grade** Compensation level of a position as found on the Richland County Wage Schedules
- 3. **FLSA Status** Defines position entitlement to salary or time and/or one half premium
- 4. **Category** Defines position as full-time, part-time, reserve/pool, limited term, or seasonal.
- 5. **Capacity** Indicates if the position's intended capacity of average hours per week
- B. Position Description Content: The authority and responsibility to manage and direct employees, assign work duties, and schedule employee hours is a function of management. Position description changes that are necessary to reflect assigned duties and requirements, are delegated to the position's department head with review by the County Administrator, or supervisory committee as appropriate. At the discretion of the County Administrator, modifications of department position descriptions significantly impacting department operations must be approved by the County Board.
- C. Department Heads are responsible for ensuring their department's employees have a signed copy of their most recent position description submitted to the employees' individual personnel file. The position description is not to serve as a contract of employment, but as an understanding of general work expectations.
- D. *Record Retention:* A master copy of all position descriptions shall be stored with the County Administrator, or designee as assigned.

SECTION 7: RECLASSIFICATION PROCESS

- A. A reclassification is a change to any one of the classification components listed above in section 6A.
- *B.* Operational needs, essential functions and market demands will change. Positions may require a reclassification of title, wage grade, FLSA status, category or hourly capacity. Reclassifications will be entertained by the County Administrator and the Finance and Personnel Committee on an annual basis in conjunction with the budget process unless an emergency arises or a violation of the policy performance goals is identified. Reclassifications require resolution by the County Board.

- C. Reclassification Procedure:
 - 1. Department heads will present a completed reclassification request form with supporting documents to the county administrator or supervisory committee (when the department head is an elected official). [Reference Appendix B: "Reclassification Request"]
 - a. Requests involving the amendment to the pay grade assignment or FLSA classification will be forward to the County's compensation plan consultant for review and recommendation. Fees for the reclassification review will be charged to the requesting department.
 - 2. The county administrator, or supervisory committee (when the department head is an elected official), may take action to recommend the reclassification to the Finance and Personnel Committee.
 - 3. With the recommendation of the Administrator or supervisory committee (when the department head is an elected official), departments will present a completed reclassification request form with supporting documents to the Finance and Personnel Committee.
 - 4. The Finance and Personnel Committee may recommend a resolution to the Richland County Board of Supervisors, or deny the request.
 - 5. Any reclassification changes that are approved will be implemented on the first day of the first full pay period of the new budget year unless otherwise specifically requested by the department and approved by the Finance and Personnel Committee, or County Board.
 - 6. Reclassifications in a pay grade may be warranted by the following criteria:
 - a. Infraction of policy performance goals. Proven recruitment and retention trends indicating a clear need for reclassification.
 - b. The significant addition or deletion of essential job functions, skill requirements, educational requirement, and responsibilities; as added/or deleted from the position description since the last evaluation of the position. An increase/or decrease in volume of previously established functions, or comparable functions, does not warrant a reclassification in wage grade.
 - c. Clear indication of adverse impact related to department hierarchy and/or inconsistency with the Richland County compensation philosophy (section 1) and/or principles (section2).

d. A significant operational need, with overwhelming justification given by the department head, and supported by the county Administrator or supervisory committee (when the department head is an elected official).

SECTION 8: THE STAFF AUTHORIZATION TABLE

- A. Operational needs within departments may require the adjustment and reauthorization of staff positions. Creations and deletions will be entertained by the County Administrator and Finance and Personnel Committee on an annual basis in conjunction with budget preparations unless an emergency arises or a violation of policy performance goals is proven.
- B. The Richland County Staff Authorization Table is a consolidated schedule of all authorized position classifications and staffing levels for Richland County Departments. The table represents the maximum allowable staffing positions authorized to the department and does not represent the actual head count or funded positions. [Reference Appendix D]
- C. Total authorized staffing levels for department positions, as found in the staff authorization table, shall be approved by the Richland County Board of Supervisors. Authorized staffing levels will be considered the maximum, with discretion to operate at lower levels controlled by department heads based on needs and available funding. Limited term employment does not need to be authorized by indication on the table.

D. Exception Pine Valley — The Pine Valley Administrator is granted authority to amend to exceed or modify the authorized count of healthcare and supporting staff positions to meet needs of census and market changes. Changes will be confirmed by the County Administrator and all changes will be reported to the Finance and Personnel Committee.

- E. Amending the authorization count, or removing an existing position, procedure:
 - The department head should present their proposal(s) of amending the authorization count, or deletion of a position, to the county administrator or supervisory committee (when the department head is an elected official). The administrator or supervisory committee may take action to recommend to the Finance and Personnel committee.
 - 2) The department head must present their proposal(s) of position deletion to the Finance and Personnel committee. The Finance and Personnel committee may recommend a resolution to the Richland County Board of Supervisors.

- 3) Pending the Finance and Personnel Committees recommendation, the department head must present the proposal(s) of position deletion to the Richland County Board of Supervisors by resolution. The Richland County Board of Supervisors may take action to amend the count or delete the position from the Richland County Authorization Table.
- F. Creating a position procedure:
 - 1. Creation of a new position may be warranted by the following of criteria:
 - a. The proposed position contains new essential job functions, or requirements that are not already consolidated under an existing position title on the Richland County wage schedules.
 - b. Significant operational changes in a department that are adding new programs and services.
 - c. Requirements driven by grant and/or funding needs.
 - d. A significant operational need, with overwhelming justification given by the department head, and supported by their advisory committee.
 - 2. Department heads will present the request to their supervisory committee. A New Position Request Form will be submitted with information and supporting documents that include: 1) a position description, 2) a job description questionnaire provided by the compensation plan consultant, 3) narrative of reasoning, and 4) a statement of financial impact. [Reference Appendix C]
 - 3. The supervisory committee may take action to recommend the creation to the County Administrator and Finance and Personnel committee.
 - 4. The New Position request will be submitted to the County Administrator. The County Administrator will forward the "New Position Request" to the County's compensation plan consultant for review and opinion. Fees for the creation study will be charged to the requesting department.
 - 5. The Department head will present the following to the Finance and Personnel Committee 1) position description, 2) a job description questionnaire, 3) narrative of reasoning, and 4) a statement of financial impact 4) the supervisory committee recommendation, and 5) the recommendation from the compensation plan consultant.

- 6. The Finance and Personnel committee may take action to recommend resolution to the Richland County Board of Supervisors.
- 7. Pending the Finance and Personnel Committees recommendation, the department head must present the proposal(s) of creation to the Richland County Board of Supervisors. The Richland County Board of Supervisors may take action to create the position and to amend the Richland County Staff Authorization Table and Compensation Table.
- 8. Any newly created positions that are approved will be implemented on first day of the first full pay period of the new budget year unless otherwise specifically requested and approved by the Richland County Board of Supervisors.

SECTION 9: EMPLOYEE MOVEMENT

With relation to the county wage schedule, employees may transition from one position to another during their tenure with Richland County. transitions will be defined as a promotion, a lateral transfer or a demotion. The receiving department is required to submit a Payroll Status Change (Appendix A) to the Administrator's Office to initiate.

A. PROMOTION

- A promotion is the transition of a County employee into a position of a higher pay grade. It is understood that such a transition can be initiated by the employer or employee.
 - 1) An employee will not have a wage rate reduction resulting in a promotion.
 - 2) When transitioning up to the higher pay grade, the employee will move to the next step that generates an increase, or allowable by policy.
 - 3) An employee promoted into a higher wage grade and assuming a higher wage rate may continue to progress according to section 4.
 - 4) Changes in an employee's wage rate will be effective on the day the employee assumes the position of promotion. The employee will be eligible for an annual step increase, if available, on the anniversary of that date, pending department head approval.

B. LATERAL TRANSFER

Lateral Transfer is the transition of a County employee into a position found in their current pay grade.

1) An employee will not have a wage rate reduction resulting in a lateral transfer.

- 2) An employee transferring into a position of equal wage grade, upon reassignment by the county, will maintain current step and anniversary date may continue to progress according to section 4.
- 3) The employee will be eligible for an annual step increase, if available, on the anniversary of their established date from the previous position, pending department head approval.

C. DEMOTION

- A demotion is viewed as the transition of a County employee into a position found in a lower pay grade. It is understood that such a transition can be initiated by the employer or employee.
 - 1) An employee is subject to a wage rate reduction.
 - 2) An employee transferring into a position of a lower wage grade may continue to progress according to section 4.
 - 3) Changes in an employee's wage rate will be effective on the day the employee assumes the new positon. The employee will be eligible for an annual step increase, if available, on the anniversary of that new date, pending department head approval.

SECTION 10: REVIEW AND MAINTENANCE

A review of this compensation plan and all job positions will be conducted every five years, at the request of the County Administrator, or at the direction of the Finance and Personnel Committee or Richland County Board.

SECTION 11: REVISION HISTORY

Revision History					
Adoption/Revision Date	Overview of Adoption/Revision	Committee Action / Resolution			
01/19/2020	Original				

EFFECTIVE DATE	PAYROLI	EMP ID #		
EMPLOYEE NAME				
CHANGE(S)	FR	OM		ТО
	GRADE		GRADE	
ΡΑΥ	STEP		STEP	
	RANGE		RANGE	
	HOURLY RATE		HOURLY R	ATE
JOB TITLE				
DEPARTMENT				
WEEKLY HOURS				
SHIFT				
	D PART-TIMF W	ITH BENEEITS W	ORK 17 50+	HRS P/WK
CALL-IN	D PART-TIME/TI	EMP CASUAL NO	D BENEFITS	
	REASON	I(S) FOR THE CHAN	IGE(S)	1
	HIRED			REHIRED
	PROBATION ENDER)		TRANSFER
	2 YEAR WAGE INCR	REASE		RETIREMENT
	SENIORITY INCREA	SE		TERMED
	PROMOTION			DISCHARGED
	DEMOTION			LAYOFF
	SUSPENSION			
		MEDICAL		NON MEDICAL
LEAVE OF ABSENCE FROM:			TO:	
FMLA FROM:			TO:	
COMMENTS:				
AUTHORIZED BY:			DATE:	
APPROVED BY:			DATE:	

APPENDIX A: PAYROLL STATUS CHANGE FORM

APPENDIX B: RECLASSIFICATION REQUEST

1. Department:	2. Number of employees:	3. Full-time/Part-time					
4. Current Position Title:	5. Pay Grade:						
6. Proposed Position Title:		7. Proposed Pay Grade:					
8. Date materials effectively	received by Administrator:	9. Proposed Effective Date:					
	Required Supporting Docum	nentation					
Current job description	Required Supporting Docum	incircation.					
Proposed job description and title, indication of addition or deletion of significant duties, skill requirements, responsibilities, and/or education or experience requirements							
Narrative of why there are significant addition of duties, educational needs or experience requirements for the position; or why there are significant reductions in duties, education needs or experience requirements for the position.							
Supporting documentat	tion (i.e. study data); including	g consultant review					
Total financial impact to	o implement reclassification:	\$ Budget year:					
Dlan of how financial in	anact will be abcorbed						
	ipact will be absorbed						
Department Head Signature: Date:							
Administrator/Supervisory	Administrator/Supervisory Action: Approved Denied Date:						
F+P Committee Action:	F+P Committee Action: Approved Denied Date:						
Compensation Plan Consulta	nt: 🗌 Endorsement 🗌 De	nied Date:					

TO BE COMPLETED BY THE COUNTY ADMINISTRATOR OR DESIGNEE

Approved New Position Title:		Effective Date:		
Pay Grade:		Pay Class: hourly; salary; other		
Job Code:		Union Code:		
Workmen's Comp Code:		EEOC Job/Salary Category:		
New EEOC Function Number:				
Signature of Administrator:	Date:	Approve // Disapprove		
Administrator Comments:				

APPENDIX C: NEW POSITION REQUEST FORM

1. Proposed Position Title:		2. Department:				
3. Position reports to:	4. Date all materials received by					
5. 🗌 Full-time; 🗌 Part-Time: [Other:	6. Estimated	l hours per week:			
LTE/Seasonal/Reserve/Intern						
7. Benefits Eligibility:	8. Is this position covered by revenue funding:	grant or 9. Proposed date to fill position:				
	Required Supporting Docum	nentation:				
Proposed job descrip skill requirements, re	tion and title, indication of addies sponsibilities, and/or education	ition or deleti on or experien	on of significant duties, ace requirements			
Proposed pay grade	Proposed pay grade					
Supporting documen	tation (i.e. job study data); inclu	iding consulta	ant review			
Total financial impac	Total financial impact to implement new position: \$Budget year:					
Plan of how financial	Plan of how financial impact will be absorbed					
Proposed change to department's organizational chart						
Department Head Signature: Date:						
Administrator / Supervisory Action: Approved Denied Date:						
F+P Committee Action:ApprovedDeniedDate:						
Compensation Plan Consultant: Endorsement Denied Date:						

TO BE COMPLETED BY THE COUNTY ADMINISTRATOR OR DESIGNEE

Approved New Position Title:		Effective Date:						
Pay Grade:		Pay Class: hourly; salary; other						
Job Code:		Union Code:						
Workmen's Comp Code:		EEOC Job/Salary Category:						
New EEOC Function Number:								
Signature of Administrator:	Date:	Approve // Disapprove						
Administrator Comments:								

APPENDIX D: STAFF AUTHORIZATION TABLE

		STAFF AUTHORIZATION TABLE									
								PERSON	NNEL - C	ATEGOR	(
DEPT CODE	DEPARTMENT	DIVISION OR UNIT	POSITION TITLE	PAY GRADE	FLSA STATUS	WEEKLY CAPACITY	REGULAR FULL-TIME	REGULAR PART-TIME	LIMITED TERM	RESERVE/ CALL-IN/ SEASONAL	CONTRACT / Lease
5115	Administration		County Administrator	By Res	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Payroll & Benefits Specialist	н	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Accounting Supervisor	J	Hourly	40 TOTAL:	1.00	0.00	0.00	0.00	0.00
		STAFF AUTHORIZATION TUBE VERSION CONTRACT CONTR	0.00								
5245	STAFF AUTHORIZATION TABLE DEPARTNENT OVISION OUNT DOSTION ITTLE PAY GRADE STATUS PLSS CARCET REGULAR REGULAR (ALL-TIME PART-TIME PART-TIME List TE TERM SEASONAL Coll Coll Coll Coll Coll Coll Coll Coll	0.00									
			Advanced Emergency Medical Tech (Admin)	E*F	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Officer)	E*F	Hourly	40	1.10	0.00	0.00	0.00	0.00
			Advanced Emergency Medical Technician	B*C	Hourly	40	4.00	4.00	0.00	0.00	0.00
			Ambulance Crew Member	\$20/call	Hourly		0.00	0.00	0.00	23.00	0.00
			Ambulance Driver	\$15/call	Hourly		0.00	0.00	0.00	3.00	0.00
			All Hazards Planner	Contract			0.00	0.00	0.00	0.00	1.00
						TOTAL:	7.10	4.00	0.00	26.00	1.00
55.40	Child Summert Office		Child Cuppert Director		Llouwhy	40	1.00	0.00	0.00	0.00	0.00
5540	Child Support Office		Child Support Worker	F	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Child Support/Staff Attorney-Assistant		Tiouny	40	1.00	0.00	0.00	0.00	0.00
			Corporation Counsel	By Res	Exempt	40	0.20	1.00	0.00	0.00	0.00
						TOTAL:	2.20	1.00	0.00	0.00	0.00
5121	Clerk of Court		Clerk of Circuit Court	By Res	Elected		1.00	0.00	0.00	0.00	0.00
			Deputy Clerk of Court	G	Hourly	40	2.00	0.00	0.00	0.00	0.00
			Bailiff	В	Hourly		0.00	0.00	0.00	8.00	0.00
						TOTAL:	3.00	REGULAR PART-TIME LIMITED TERM RESERVE SEASONAL CONTI Le 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00		
State	Circuit Court		Judge	By State	Elected	State	1.00	0.00	0.00	0.00	0.00
			Court Reporter	By State	Hourly	State	1.00	0.00	0.00	0.00	0.00
						TOTAL:	2.00	0.00	0.00	0.00	0.00
5127	Coroner		County Coroner	By Res	Elected	40	1.00	0.00	0.00	0.00	0.00
			Deputy Coroner	By Res	Hourly		0.00	0.00	0.00	5.00	0.00
					1	TOTAL:	1.00	0.00	0.00	5.00	0.00
5164	Corporation Counsel		Corporation Counsel	By Res	Exempt		0.00	1.00	0.00	0.00	0.00
			Child Support Administrator / Assistant	By Res	Appointed		0.00	1.00	0.00	0.00	0.00
			Corporation Counser			TOTAL:	0.00	2.00	0.00	0.00	0.00
E1.14	County Clark		CouptyClark	By Boo	Elector		1.00	0.00	0.00	0.00	0.00
5141	County Clerk		Accounts Pauchlo Specialist/ Deputy County	by Res	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Accounts 1 ayable Specialist Deputy County	0	riouny	TOTAL:	2.00	0.00	0.00	0.00	0.00
	Courthouse										
5194	Maintenance		Maintenance Supervisor		Hourly	40	1.00	0.00	0.00	0.00	0.00
			Custodian	E	Hourly	40	1.00	0.00	0.00	0.00	0.00
						TOTAL:	2.00	0.00	0.00	0.00	0.00
	D 1 + 1 + 4 +			5.01.1			4.00				0.00
5161	District Attorney		District Attorney	By State	Elected		1.00	0.00	0.00	0.00	0.00
			Assistant District Attorney	By State	Appointed	40	0.00	1.00	0.00	0.00	0.00
			Victim/Witness Coordinator	G	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Legal Assistant	G	Hourly	40	1.00	0.00	0.00	0.00	0.00
						TOTAL:	3.00	1.00	0.00	0 0.00 0.00 0 0.00 0.00 0 0.00 0.00 0 23.00 0.0 0 23.00 0.0 0 0.00 1.0 0 26.00 1.00 0 0.00 0.0 0 0.00 0.0 0 0.00 0.00 0 0.00 0.00 0 0.00 0.00 0 0.00 0.00 0 0.00 0.00 0 0.00 0.00 0 0.00 0.00 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 0 0.00 0.0 <	0.00
EZCO	Economic			Dy Dee	Evenet	40	1.00	0.00	0.00	0.00	0.00
5/62	Development		Economic Development Director	by Kes	∈xempt	40 TOTAL	1.00	0.00	0.00	0.00	0.00
						I STAL	1.00	0.00	0.00	0.00	0.00

	STAFF AUTHORIZATION TABLE											
				<u> </u>				PERSON	INEL - C			
DEPT CODE	DEPARTMENT	DIVISION OR UNIT	POSITION TITLE	PAY GRADE	FLSA STATUS	WEEKLY CAPACITY	REGULAR FULL-TIME	REGULAR PART-TIME	LIMITED TERM	CALL-IN/	CONTRACT / Lease	
5044					Launder		0.00	4.00	0.00	SFASUNAL	0.00	
5614	Fair & Recycling		Clorical		Hourly	28	0.00	1.00	1.00	0.00	0.00	
			Fair Groundskeeper	B	Hourly		0.00	0.00	1.00	0.00	0.00	
			Fair Judge	see note	Hourly		0.00	0.00	48.00	0.00	0.00	
			-	\$7.05/hr	Lloudu		0.00	0.00	2.00	0.00	0.00	
			Fair Misc Worker	\$7.25/hr	Hourly		0.00	0.00	15.00	0.00	0.00	
				φr i20/m	liouny	TOTAL:	0.00	1.00	68.00	0.00	0.00	
5124	Family Court		Family Court Commissioner	By Res	Exempt		0.00	1.00	0.00	0.00	0.00	
						TOTAL:	0.00	1.00	0.00	0.00	0.00	
	Health & Human Services											
5501			Director	R	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5501			Corporation Counsel	By Res	Exempt		0.00	1.00	0.00	0.00	0.00	
5501	Administration & Building	Operations	Admin & Building Operations Manager	J	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5501			Cont Administrative Secretary	G E	Exempt	40	2.00	0.00	0.00	0.00	0.00	
5504			Spanish Translators	\$35/hr	Hourly	40	0.00	0.00	0.00	4.00	0.00	
			Secretary (SWWDB Leased Position)	\$14.79/hr	Hourly	24	0.00	0.00	0.00	0.00	1.00	
			Custodian (SWWDB Leased Position)	\$15.61/hr	Hourly	35	0.00	0.00	0.00	0.00	1.00	
			Fill-In Custodian (SWWDB Leased Position)	\$15.00/hr	Hourly		0.00	0.00	0.00	0.00	1.00	
5501	Business & Financ	ial Services	Business & Financial Services Manager	М	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5504		_	Fiscal Specialist	F	Hourly	40	3.00	0.00	0.00	0.00	0.00	
5507	Aging & Disability Reso	ource Center	ADRC Manager	L	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5507			Information & Assistance Specialist	H F	Exempt	40	3.00	0.00	0.00	0.00	0.00	
5529			Disability Benefit Specialist	G	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5403			Elderly Benefit Specialist	G	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5563			Secretary	E	Hourly	40	1.00	0.00	0.00	0.00	0.00	
5563			Driver/Escort Driver	Α	Hourly		0.00	3.00	0.00	0.00	0.00	
5477	Behavioral Hea	Ith Services	Behavioral Health Services Manager	N	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5472			CCS Supervisor	М	Exempt	40	1.00	0.00	0.00	0.00	0.00	
E 4 E 7			Quality Coordinator (LONGTERM VACANCY)		Exempt	40	1.00	0.00	0.00	0.00	0.00	
5457			Early Intervention Special Educator (LONGTERM		Exempt	40	1.00	0.00	0.00	0.00	0.00	
			VACANCY) Speech & Language Pathologist (LONGTERM		Exempt	40	0.00	1.00	0.00	0.00	0.00	
			VACANCY)		Exempt	28	0.00	1.00	0.00	0.00	0.00	
			Occupational Therapist (LONGTERM VACANCY)		Exempt	28	0.00	1.00	0.00	0.00	0.00	
5477			Business Systems Analyst	Н	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5472			Mental Health Therapist	ĸ	Exempt	40	5.00	0.00	0.00	0.00	0.00	
5478			Substance Abuse Counselor		Exempt	40	1.00	0.00	0.00	0.00	0.00	
5408			Adult Protective Services Worker		Exempt	40	1.00	0.00	0.00	0.00	0.00	
5532			APS/Crisis Professional	Н	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5459			CLTS & BT3 Case Manager	H	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5401			Psychiatric RN	К	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5472			Psychiatric RN	K	Exempt	40	1.00	0.00	0.00	0.00	0.00	
			Psychiatric RN (SWWDB Leased Position)	\$23.93/hr	Exempt	20	0.00	0.00	0.00	0.00	1.00	
			Crisis Case Worker (SWWDB Leased Position)	\$24.97/hr	Exempt	40	0.00	0.00	0.00	0.00	1.00	
			Service Facilitator (SWWDB Leased Position) Rehabilitation Worker (SWWDB Leased	\$19.77/hr	Exempt	40	0.00	0.00	0.00	0.00	3.00	
			Position)	\$20.05/hr	Hourly	10	0.00	0.00	0.00	0.00	1.00	
5502	Child & Yo	uth Services	Child & Youth Services Supervisor	K	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5502			Child and Youth Services Manager	L	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5502			Child & Youth Services Case Manager	H	Exempt	40	5.00	0.00	0.00	0.00	0.00	
5502			Youth Aide Worker Family Preservation Worker (Vacant SWWDB	G	Exempt	40	1.00	0.00	0.00	0.00	0.00	
-			Leased Position)		Hourly	28	0.00	0.00	0.00	0.00	1.00	
5503	Econo	mic Support	Economic Support Manager	K	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5503		-	Economic Support Specialist	F	Hourly	40	13.00	0.00	0.00	0.00	0.00	
5401	F	ublic Health	Public Health Manager/Local Health Officer	N	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5401			Public Health Nurse (1-LONGTERM VACANCY)	к	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5401			Public Health Clinic Nurse	к	Exempt	40	1.00	0.00	0.00	0.00	0.00	
			VACANCY)	н	Exempt	40	1.00	0.00	0.00	0.00	0.00	
5580			Nutrition Program Coordinator	G	Hourly	40	1.00	0.00	0.00	0.00	0.00	
5583			Nutrition Site Worker	A	Hourly		0.00	5.00	0.00	0.00	0.00	
5588			Nutrition Driver	A	Hourly	TOTAL	0.00	2.00	0.00	0.00	0.00	
						IUIAL:	64.00	13.00	0.00	4.00	10.00	

			STAFF AUTHOR	RIZATIO	N TAE	BLE					
								PERSON	NNEL - C	ATEGOR	r
DEPT CODE	DEPARTMENT	DIVISION OR UNIT	POSITION TITLE	PAY GRADE	FLSA STATUS	WEEKLY	REGULAR FULL-TIME	REGULAR PART-TIME	LIMITED TERM	RESERVE/ CALL-IN/	CONTRACT / Lease
5321	Highway		Commissioner	Р	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Bookkeeper	Н	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Clerk	F	Hourly	35	1.00	0.00	0.00	0.00	0.00
			Patrol Superintendent	K	Exempt	40	2.00	0.00	0.00	0.00	0.00
			Parts Manager/Shop Clerk	н	Hourly	40	1.00	0.00	0.00	EL - CATEGORY CALL-IN/ CALL-IN/ SEASONAL CONTRA Lease 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 00 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.00 000 0.00 0.	
			Lead Paving Foreman	1	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Lead Grade Foreman	i	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Sign Foreman	G	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Assistant Shop Foreman	Ħ	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Mechanic	G	Hourly	40	2.00	0.00	0.00	0.00	0.00
			Equipment Operator/Patrolman	G	Hourly	40	18.00	0.00	0.00	4.00	0.00
			Seasonal	A	Hourly	TOTAL	0.00	0.00	2.00	0.00	0.00
						TOTAL.	31.00	0.00	2.00	4.00	0.00
5741	Land Conservation		County Conservationist	L	Exempt	35	1.00	0.00	0.00	0.00	0.00
			Secretary	E	Hourly	35	1.00	0.00	0.00	0.00	0.00
5750			Conservation Technician	Н	Hourly	35	2.00	0.00	0.00	0.00	0.00
						TOTAL:	4.00	0.00	0.00	0.00	0.00
5182	5182 Management		Management Information Systems Director	м	Exempt	40	1.00	0.00	0.00	0.00	0.00
			MIS Administrator	J	Hourly	40	1.00	0.00	0.00	0.00	0.00
			MIS Assistant	F	Hourly	40	1.00	0.00	0.00	0.00	0.00
						TOTAL:	3.00	0.00	0.00	0.00	0.00
	Pine Valley										
	Community Village										
5434	Ac	Iministration	Nursing Home Administrator	Р	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Human Resources Director	J	Exempt	40	1.00	0.00	0.00	0.00	0.00
E 4 2 2	Nurs		Nursing Admin Assistant	E	Hourly	36	1.00	0.00	0.00	0.00	0.00
5432			Administrative Assistant	H	Hourly	40	1.00	0.00	0.00	0.00	0.00
0402			Payroll and Accounts Payable Clerk	F	Hourly	36	1.00	0.00	0.00	0.00	0.00
			Billing Specialist	F	Hourly	36	1.00	0.00	0.00	0.00	0.00
5420		Nursing	Director of Nursing	м	Exempt	40	1.00	0.00	0.00	0.00	0.00
5421			RN Manager	L	Hourly	40	2.00	0.00	0.00	0.00	0.00
			RN Supervisor	ĸ	Hourly	40	3.00	0.00	0.00	0.00	0.00
			Registered Nurse	J	Hourly	38.75	5.00	1.00	0.00	0.00	0.00
			Registered Nurse	By Res	Hourly		0.00	0.00	0.00	12.00	0.00
5422			LPN	G	Hourly	38.75	3.00	0.00	0.00	0.00	0.00
			LPN	G	Hourly	27	0.00	1.00	0.00	0.00	0.00
			LPN	By Res	Hourly		0.00	0.00	0.00	6.00	0.00
5423			CNA Nursing Assistant	D	Hourly	38.75	34.00	0.00	0.00	0.00	0.00
			CNA Nursing Assistant	D	Hourly	21	0.00	2.00	0.00	0.00	0.00
			CNA Nursing Assistant	ByRes	Hourly	23.23	0.00	0.00	0.00	28.00	0.00
			Unit Clerk	E	Hourly	38.75	2.00	0.00	0.00	0.00	0.00
			Resident Assistant	В	Hourly		0.00	0.00	0.00	5.00	0.00
		Activities	Activity Director	Contract			0.00	0.00	0.00	0.00	1.00
5424			Activity Aide	C	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Activity Aide	C C	Hourly	36 27	1.00	0.00	0.00	0.00	0.00
			Activity Aide	c	Hourly	£1	0.00	0,00	0.00	1.00	0,00
5425		Social Work	Social Services Supervisor	J	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Social Worker	Н	Hourly	40	1.00	0.00	0.00	0.00	0.00
5427		Dietary	Food Service Supervisor	G	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Lead Cook	D	Hourly	38.75	1.00	0.00	0.00	0.00	0.00
			Cook I	В	Hourly	38.75	1.00	0.00	0.00	0.00	0.00
			Food Service Worker II	В	Hourly	38.75	7.00	0.00	0.00	0.00	0.00
			Food Service Worker II	B	Hourly	23.25	0.00	0.00	0.00	6.00	0.00
5428	1	Maintenance	Maintenance Supervisor	1	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Maintenance Worker	E	Hourly	38.75	2.00	0.00	0.00	0.00	0.00
5429		CBRF	Unit Clerk	D	Hourly	38.75	1.00	0.00	0.00	0.00	0.00
			Personal Care Worker	B	Hourly	38.75	2.00	0.00	0.00	0.00	0.00
			Personal Care Worker	B	Hourly	31	0.00	2.00	0.00	0.00	0.00
			Personal Care Worker	B	Hourly	21	0.00	3.00	0.00	0.00	0.00
5430	Hr	ousekeenina	Housekeeper	A	Hourly	38.75	6.00	0.00	0.00	0.00	0.00
5.00			Housekeeper	A	Hourly	27	0.00	1.00	0.00	0.00	0.00
			Housekeeper	Α	Hourly		0.00	0.00	0.00	2.00	0.00
5431			Laundry Worker	А	Hourly	38.75	1.00	0.00	0.00	0.00	0.00
						TOTAL:	84.00	15.00	0.00	60.00	1.00

			STAFF AUTHOR	RIZATIO	N TAE	BLE					
								PERSON	NNEL - C	ATEGOR	(
DEPT CODE	DEPARTMENT	DIVISION OR UNIT	POSITION TITLE	PAY GRADE	FLSA STATUS	WEEKLY CAPACITY	REGULAR FULL-TIME	REGULAR PART-TIME	LIMITED TERM	CALL-IN/	CONTRACT / Lease
5171	Register of Deeds		Register of Deeds	By Res	Elected		1.00	0.00	0.00	0.00	0.00
			Deputy Register of Deeds	F	Hourly	35	1.00	0.00	0.00	0.00	0.00
						TUTAL.	2.00	0.00	0.00	0.00	0.00
5120	Register in Probate		Register in Probate/Judicial Assistant/Juvenile Clerk	I	Hourly	35	1.00	0.00	0.00	0.00	0.00
			Deputy Clerk of Circuit Court / Register in Probate Assistant	G	Hourly	35	1.00	0.00	0.00	0.00	0.00
						TOTAL:	2.00	0.00	0.00	0.00	0.00
	Charliff										
5210	Ac	Iministration	Sheriff	By Res	Elected		1.00	0.00	0.00	0.00	0.00
			Chief Deputy	N	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Road Patrol Lieutenant	M	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Office Manager/Conf Secretary	Н	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Clerical Assistant II	F	Hourly	40	1.00	0.00	0.00	0.00	0.00
5211		Road Patrol	Investigator	CBA	Hourly	6//3	1.00	0.00	0.00	0.00	0.00
			Patrol Sergeant	СВА	Hourly	6//3	3.00	0.00	0.00	0.00	0.00
			Deputy	CBA	Hourly	6//3	10.00	0.00	0.00	0.00	0.00
			Deputy (Reserve)	G	Hourly		0.00	0.00	0.00	8.00	0.00
			Translator	\$35/hr	Hourly		0.00	0.00	0.00	5.00	0.00
5251	J	lail/Dispatch	Dispatch/Jailer Sergeant	I I	Hourly	6//3	2.00	0.00	0.00	0.00	0.00
			Dispatch/Jailer	Н	Hourly	6//3	12.00	0.00	0.00	0.00	0.00
			Dispatch/Jailer (Reserve)	G	Hourly		0.00	0.00	0.00	8.00	0.00
						TOTAL:	33.00	0.00	0.00	21.00	0.00
5172	Surveyor		County Support	By Boo	Contract		0.00	0.00	0.00	0.00	0.10
5172	Suiveyoi		County Surveyor	Byrtes	Contract	TOTAL:	0.00	0.00	0.00	0.00	0.10
								0.00			
					_						
5682	Symons Rec Complex		Director	J	Exempt	40	1.00	0.00	0.00	0.00	0.00
			Assistant Director	F	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Custodian	G	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Recentionist	A	Hourly		0.00	11.00	0.00	0.00	0.00
			Weight Training Instructor	aa	Hourly		0.00	1.00	0.00	0.00	0.00
			Land Aerobics Instructor	E	Hourly		0.00	10.00	0.00	0.00	0.00
			Lifeguard Instructor	E	Hourly		0.00	1.00	0.00	0.00	0.00
			Water Safety Instructor	Е	Hourly		0.00	4.00	0.00	0.00	0.00
			Racquetball Instructor	aa	Hourly		0.00	1.00	0.00	0.00	0.00
			Lifeguard	ab	Hourly	TOTAL	0.00	0.00	25.00	0.00	0.00
						TOTAL.	5.00	23.00	23.00	0.00	0.00
5156	Treasurer		CountyTreasurer	By Res	Elected		1.00	0.00	0.00	0.00	0.00
			DeputyTreasurer	F	Hourly	40	1.00	0.00	0.00	0.00	0.00
5154	Property Lister		Property Tax Lister	G	Hourly	40	1.00	0.00	0.00	0.00	0.00
						TOTAL:	3.00	0.00	0.00	0.00	0.00
					_						
5670	UW-Extension		Area Director	State	Exempt	05	0.00	0.00	0.00	0.00	0.20
			Cierical Assistant II	E	Houriy	35	1.00	0.00	0.00	0.00	0.00
			Administrative Secretary	State	Hourly	20	0.00	0.00	0.00	0.00	1.00
			4-In Coordinator	State	Llourly		0.00	0.00	0.00	0.00	0.80
			Human Development and Relationships	State	Houny		0.00	0.00	0.00	0.00	0.80
			Agriculture Educator	State	Hourly		0.00	0.00	0.00	0.00	0.50
			FoodWIse Coordinator	State	Hourly		0.00	0.00	0.00	0.00	0.27
			FoodWIse Educator	State	Hourly		0.00	0.00	0.00	0.00	0.73
						TOTAL:	1.00	1.00	0.00	0.00	3.50
5670	IW Food Service		LIW Food Service Supervisor	Ц	Evernet	40	1.00	0.00	0.00	0.00	0.00
5078	511 1 300 Sel VICE		LIW Food Services (Supervisor Assistant)		Hourly	40	1.00	0.00	0.00	0.00	0.00
			Or Fold Services (Supervisor Assistant)	E	Hourry	40	1.00	0.00	0.00	0.00	0.00
			Food Service Workers	aa \$7.25	Hourly		0.00	0.00	0.00	7.00	0.00
				ψ1.20	Tiouny	TOTAL:	2.00	0.00	0.00	8.00	0.00
5550	Veterans Service		Veterans Service Officer	1	Exempt	35	1.00	0.00	0.00	0.00	0.00
			Veterans Benefits Specialist	G	Hourly	20.5	0.00	1.00	0.00	0.00	0.00
						TOTAL:	1.00	1.00	0.00	0.00	0.00
5183	Zoning & Sanitation		Zoning Administrator	L	Exempt	40	1.00	0.00	0.00	0.00	0.00
	Land Information		Zoning GIS Tech/Assistant	G	Hourly	40	1.00	0.00	0.00	0.00	0.00
			Zoning Office System Tech	F	Hourly	40	1.00	0.00	0.00	0.00	0.00
						TOTAL:	3.00	0.00	0.00	0.00	0.00
				21							
				- <u>∠</u> ⊥			-				

RICHLAND COUNTY 2021 AUTHORIZED POSITION COUNT										
Total Regular Authorized Full-time (FT) Positions		263								
Total Regular Authorized Part-time (PT) Positions		69								
Total Limited Term Authorized Employee (LTE) Positions		95								
Total Reserve/Call-in Authorized Positions		136								
Total Contracted Authorized Positions		16								
TOTAL RICHLAND COUNTY Authorized Positions		579								

APPENDIX E: WAGE SCHEDULES

DANCE	CRADE		DEDADTMENT	Stop 1	Stop 2	Stop 2	Stop 4	Stop E	Stop 6	Stop 7	Ctop 0
RANGE	GRADE		DEPARTIVIENT	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
125	R	HHS DIRECTOR	HEALTH & HUMAN SERVICES	36.67	37.52	38.38	39.23	40.08	40.93	41.79	42.64
120	Q			35.03	35.84	36.66	37.47	38.29	39.1	39.92	40.73
115	Р	HWY COMMISSIONER	HIGHWAY	33.38	34.15	34.93	35.71	36.48	37.26	38.03	38.81
110	0			31.73	32.47	33.21	33.95	34.69	35.42	36.16	36.90
105	N			20.08	20.79	21.40	22.10	22.00	22 50	24.20	24.09
105	IN	HHS PUBLIC HEALTH MGR	SHERIFE	50.08	50.76	51.40	52.10	52.00	55.56	54.20	54.90
		CHIEF DEPUTY SHERIFE	SHERT								
100	м	MGMNT INFO SYSTM DIRCTR	CH IT DEPT	28.44	29.10	29.76	30.42	31.09	31.75	32.41	33.07
		ECONOMIC DEVELOPMENT DIRECTOR	CH ECONOMIC DEVELOPMENT								
		HHS COMPREHENSIVE COMMUNITY SERV SPRVSR 19-									
		101	HEALTH & HUMAN SERVICES								
		HHS BUSINESS & FINANCIAL SERVICES MANAGER 20-									
		97	HEALTH & HUMAN SERVICES								
		SHERIFE RD PATROL LIFLIT	SHERIFE								
			SHERT								
95	L	COUNTY CONSERVATIONIST	CH LAND CONSERVATION	26.80	27.42	28.04	28.67	29.29	29.91	30.54	31.16
		ZONING ADMINISTRATOR	CH ZONING								
		HHS ARDC MANAGER	HEALTH & HUMAN SERVICES								
		HHS CHILD & YOUTH SRVCS MGR 19-80	HEALTH & HUMAN SERVICES								
		HHS LONG TERM SUPPORT & BIRTH TO 3									
		SUPERVISOR 19-80	HEALTH & HUMAN SERVICES								
90	К	CH CHILD SUPPORT DIRECTOR RES 21-37	CH CHILD SUPPORT	25.15	25.73	26.32	26.90	27.49	28.07	28.66	29.24
		EM MED SER/EM MGMT DIR	CH AMBULANCE								
		21-20	HEALTH & HUMAN SERVICES								
		HHS FCON SUPPORT MANAGER 19-18	HEALTH & HUMAN SERVICES								
		HHS MENTL HITH THER LIC	HEALTH & HUMAN SERVICES								
		HWY PATROL SUPERINTENDENT	HIGHWAY								
		HHS PSYCHIATRIC NURSE Res 20-27	HEALTH & HUMAN SERVICES								
		HHS PUBLIC HLTH NURSE Res 20-27	HEALTH & HUMAN SERVICES								
85	J	COUNTY CLERK DEP/ACCT SUPERVISR	CH COUNTY CLERK	23.50	24.05	24.60	25.14	25.69	26.24	26.78	27.33
		HHS AMDMINISTRATION & BUILDING OPERATIONS									
		MANAGER 20-97	HEALTH & HUMAN SERVICES								
		HHS ADMINISTRATIVE SUPERVISUR 18-18 20-97	HEALTH & HUMAN SERVICES								
		MGMNT INFO SYSTM ADMNST Res 18-97	CH IT DEPT								
		SYMONS DIRECTOR	SYMONS								
80	1	CH MAINTENANCE SUPERVISOR	CH MAINTENANCE	21.85	22.36	22.87	23.38	23.89	24.39	24.90	25.41
		HHS TREATMNT COURT COOR	HEALTH & HUMAN SERVICES								
		HHS SUBSTNCE ABUSE COUN RES 19-80	HHS								
	_	HWY LEAD GRADE FOREMAN	HIGHWAY								
		HWY LEAD PAVING FOREMAN	HIGHWAY								
		HWY LEAD SHOP FOREMAN	HIGHWAY								
		REG PROBATE/REGISTRAR Res 18-97	CH PROBATE								
		SHERIFF DISP/JAILE SGT KES 18-97	SHERIFF								
		VETERAN SERVICE OFFICER	CH VETERANS SERVICE								
75	н	LEAD CHILD SPPRT WORKER RES 21-37	CH CHILD SUPPORT	20.21	20.68	21.15	21.62	22.09	22.56	23.03	23.50
		CONSERVATION TECHNICIAN	CH LAND CONSERVATION								
		HHS ADULT PROTECTIVE SERVICES/CRISIS									
		PROFESSIONAL RES 21-30	HEALTH & HUMAN SERVICES								
		HHS BUSINSS SYSTM SUPRV	HEALTH & HUMAN SERVICES								
		HHS CHILDREN LONG TERM & BIRTH TO 3 CASE MGR									
		19-80	HEALTH & HUMAN SERVICES								
		HHS EARLY INTERVENTION SPCL EDUCATOR RES 19-									
			HEALTH & HUMAN SERVICES								
		THIS ECON SPPKT LEAD WRK	HEALTH & HUMAN SERVICES								
		HIS NEALIN & WELLNESS COUR Res 18-97	HEALTH & HUMAN SERVICES								
			HEALTH & HUMAN SERVICES								
	-	HHS INFORMATION & SYSTEM SPECIALIST 19-101	HEALTH & HUMAN SERVICES								
		HWY ASSTNT SHOP FOREMAN	HIGHWAY								
		HWY BOOKKEEPER	HIGHWAY								
		HWY PARTS MNGR/SHOP CLK	HIGHWAY								
		PAYROLL & BENEFITS SPCL	CH COUNTY CLERK								
		SHERIFF DISP/JAILER Res 18-97	SHERIFF								
		SHERIFF OFFICE MGR/CONF	SHERIFF								
		UW FOOD SER SUPERVISOR	CH UW FOOD SERVICE								

70	G	ACCOUNTS PAYABLE SPECIALIST Res 18-97	CH COUNTY CLERK	18.56	18.99	19.42	19.85	20.29	20.72	21.15	21.58	
		CLERICAL ASSISTANT II (DEPLITY) Res 18-97										
		CLERK OF COURT DEDUTY Page 18 07										
		CLERK OF COORT DEPOTT RES 16-97										
		LEGAL ASSISTANT	CH DISTRICT ATTORNEY									
		HHS CONFID ADMIN SCRTRY	HEALTH & HUMAN SERVICES									
		HHS ELDERLY BENF SPCL	HEALTH & HUMAN SERVICES									
		HHS NUTRITION PROG COOR	HEALTH & HUMAN SERVICES									
		HHS SW DISABLTY BEN SPE	HEALTH & HUMAN SERVICES									
		HHS TEMP CERT SOC WORKR	HEALTH & HUMAN SERVICES									
		HHS YOUTH AIDE WORKER	HEALTH & HUMAN SERVICES									
		HWY EQUIP OPER/PATROLMN	HIGHWAY									
		HWY SEASONAL PATROLMAN RES 21-20	HIGHWAY									
			HIGHWAY									
	_		HIGHWAY									
		PROPERTY TAX LISTER	CH PROPERTY LISTER									
		SHERIFF DEPUTY - TEMP CASUAL	SHERIFF									
		SHERIFF DISP/JAILER - TEMP CASUAL	SHERIFF									
		SYMONS MAINTENANCE	SYMONS									
		VETERANS BENEFIT SPCLST	CH VETERANS SERVICE									
		VICTM WTNS COOR/LEGAL S	CH DISTRICT ATTORNEY									
		ZONING GIS TECH/ASSTNT	CH ZONING									
65	F	CHILD SUPPORT WORKER	CH CHILD SUPPORT	16.92	17 31	17 70	18 10	18 49	18 88	19 28	19.67	
	· ·	CIERICAL ASSISTANT	CH PROBATE	10.52			10.10		_5.00			
			HEALTH & HUMAN SERVICES									
		TITS ECONOMIC SUPP SPECE	HEALTH & HUMAN SERVICES									
		HWY CLERK	HIGHWAY	·								
		MNGMNT INFO SYSTM ASST Res 18-97	CH IT DEPT									
		REGISTER OF DEEDS DEPUTY	CH REGISTER OF DEEDS									
		SECRTRY/CERL ASST II	SHERIFF									
		SYMONS ASSISTANT DIRECTR	SYMONS									
		ZONING OFFICE SYS TECH	CH ZONING									
60	*	AMB EMERGENCY MED TECH (ADMIN)	CH AMBULANCE	15.82	16.19	16 55	16.93	17 29	17.66	18.06	18.40	
EE	*	AME EMERGENCY MED TECH (TRAINING)		14.10	14.42	14.75	15.09	15 41	15 72	16.07	16.20	
		AME EMERGENCT MED TECH (TRAINING)	CH AWBOLANCE	14.10	14.45	14.75	15.06	15.41	15.75	10.07	10.59	
= 0						15.00						
50	E		CH CHILD SUPPORT	15.27	15.63	15.98	16.34	16.69	17.05	17.40	17.76	
		ADMINISTRATIVE SECRIRY	CH UW EXTENSION									
		ADMINISTRATIVE SECRTRY	HEALTH & HUMAN SERVICES									
		CLERICAL ASSISTANT II	CH UW EXTENSION									
		CLERICAL ASSISTANT II	HEALTH & HUMAN SERVICES									
		CUSTODIAN	CH MAINTENANCE									
		LAND AEROBICS INSTRUCTOR	SYMONS									
		LIFEGUARD INSTRUCTOR	SYMONS									
		SECRETARY	CH LAND CONSERVATION									
		SECRETARY	HEALTH & HUMAN SERVICES									
			CH OW FOOD SERVICE									
		WATER EXERCISE INSTRUCTOR	STIVIONS									
		WATER SAFTEY INSTRUCTOR/TRAINER	SYMONS									
45	D	FAIR & RECYCLING COORDINATOR	FAIR	14.04	14.36	14.69	15.01	15.34	15.67	15.99	16.32	
		REAL PROPERTY LISTER ASSISTANT	REAL PROPERTY LISTER									
40	С	PRIVATE LESSONS	SYMONS	12.99	13.30	13.60	13.90	14.20	14.51	14.81	15.11	
35	*	AMB EMERGENCY MED TECH	CH AMBULANCE	12.73	13.03	13.32	13.62	13.91	14.21	14.50	14.80	
20	D	GROUNDSKEEPER	EAIR	12.02	12 21	12 50	12 97	12 15	12 / 2	12 71	12 00	
- 30	D	DAULEE		12.03	12.51	12.55	12.07	13.15	13.43	13.71	13.55	
			CLERK OF COOKT									
		STORAGE COORDINATOR	FAIR									
25	Α	CLERICAL TEMPORARY	FAIR	11.14	11.40	11.66	11.91	12.17	12.43	12.69	12.95	
		CLERICAL TEMPORARY	SHERIFF									
		CUSTODIAN WEEKEND MAINTENANCE	SYMONS									
		HHS DRIVER/ESCORT DRIVER	HHS									
		HHS NUTRITION DRIVER	HHS									
		HHS NUTRITION SITE WORKER	HHS									
		HIGHWAY SEASONAL	HIGHWAY									
		RECEPTIONIST	SYMONS									
			510005									
20	22	CAFETERIA WORKER		10.21	10 56	10.90	11 02	11 27	11 51	11 75	11 00	
20	dd		SVM ONE	10.51	10.30	10.00	11.03	11.27	11.31	11.75	11.39	
			SYMUNS									
		RAQUETBALL INSTRUCTOR	SYMONS									
		WATER SAFETY INSTRUCTOR	SYMONS									
		WEIGHT TRAINING INSTRUCTOR	SYMONS									
15	ab	LIFEGUARD	SYMONS		9.55	9.78	10.00	10.21	10.44	10.66	10.88	11.10
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10	ac	DAY CARE AIDE	SYMONS		8.84	9.06	9.26	9.45	9.67	9.87	10.07	10.28
5	a d				819	8.39	857	8.75	8.95	9.14	9.32	9.52
		MINIMUM WAGE										
		BATHROOM CLEANER	FAIR	\$	7.25							
		CASHIER	FAIR	\$	7.25							
		FOOD SERVICE WORKER	UW FOOD SERVICE	\$	7.25							
		GRANDSTAND ORGANIZER	FAIR	\$	7.25							
		MISCELLANEOUS WORKER	FAIR	\$	7.25							
		TICKET TAKER	FAIR	\$	7.25							
		SPECIAL NOTES										
		County Board Members	County Board	\$	40.00	per Count	y Board mee	ting				
		Committee Members	County Board	\$	30.00	per Comm	nittee meetir	ng				
		Fair Judge - General	Fair	\$50 f	or the fi	rst 4 hours	worked ther	n \$9 p/hr				
		Fair Judge - Beef	Fair	\$100	for the	first 4 hour	s worked the	en \$9 p/hr				
		Fair Species Group Work	Fair	\$100	for the	first 4 hour	s worked the	en \$9 p/hr				
		Fair Carcass Show Work	Fair	\$100	for the	first 4 hour	s worked be	fore noon the	en \$9 p/hr			
		Translator	HHS, Sheriff	\$	35.00	per hour						
		Coroner	Coroner	\$95 p	/call, \$	25 for crem	ation only, \$	115 for call p	lus cremat	ion		
		Coroner Deputy	Coroner	\$95 p	/call, \$	25 for crem	ation only, \$	115 for call p	lus cremat	ion		
		Ambulance Crew Member - volunteer	Ambulance	\$	20.00	per call						
		Ambulance Driver - volunteer	Ambulance	\$	15.00	per call						
		Ambulance Backup crew weekdays	Ambulance	\$	1.25	per hour						
		Ambulance Primary crew weekends & holidays	Ambulance	\$	3.00	per hour						
		Corporation Counsel	Courthouse	\$	75.00	per hour						
		Corporation Counsel	HHS	\$	75.00	per hour	3/9/2021	3/9/2022				
		County Administrator	СН	\$ 95	5,000.00	annual	\$96,900.00	\$98,850.00				
		Sheriff	Sheriff	\$ 77	7,037.21	annual						
		County Clerk	County Clerk	\$ 77	7,026.95	annual						
		County Treasurer	Treasurer	\$ 62	2,327.61	annual						
		Register of Deeds	Register of Deeds	\$ 62	2,327.61	annual						
		Clerk of Court	Clerk of Court	\$ 62	2,327.07	annual						
		Family Court Commissioner	Family Court Commissioner	\$ 25	5,457.68	annual						
		Child Supprt Administrator/Assistant	D.A/Child Support	\$ 21	,991.16	annual						
		BEYOND STEP 8 OF THE WAGE SCALE										
		Victim Witness Coordinator/Legal Secretary	District Attorney	Ş	21.73	Andrea Fi	elds					
		HHS Business System Analyst 20-97 Supervisor	HHS	Ş	24.03	Sharon Pa	isold					
		HHS Social Worker Disability Benefit Specialist	HHS	Ş	23.27	Jodi Hine	s					
		HWY Clerk	HWY	Ş	20.24	Cerresa R	ose					

RANGE	GRADE	JOB TITLE	DEPARTMENT	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
		PVH NURSING HOME & ASST LIVING ADMIN									
275	D	19-26		20.16	40.09	10 00	11 00	12.91	12 72	11 62	15 51
575	P	16-50	ADMINISTRATION	59.10	40.08	40.99	41.90	42.01	45.72	44.05	45.54
	-										
370	0			37.07	37.93	38.79	39.65	40.51	41.38	42.24	43.10
365	N	PVH DIRECTOR OF NURSING Res 19-135	DIRECTOR	34.96	35.77	36.59	37.40	38.21	39.02	39.84	40.65
360	М			32.86	33.62	34.39	35.15	35.92	36.68	37.45	38.21
255	1		CRPE	20.76	21 / 9	22.10	22.01	22.62	24.24	25.05	25 77
333	- L			50.70	51.40	52.15	52.51	33.02	54.54	33.03	55.77
			REGISTERED NURSES								
350	K	PVH RN SUPERVISOR Res 19-135	REGISTERED NURSES	28.66	29.33	30.00	30.66	31.33	32.00	32.66	33.33
345	J	PVH HUMAN RESOURCES DIR	ADMINISTRATION	26.57	27.18	27.80	28.42	29.04	29.65	30.27	30.89
		PVH SOCIAL SERVICE SUPR	SOCIAL SERVICES								
		PVH REGISTERED NURSE Res 19-135	REGISTERED NURSES								
2.40					25.04	25.54	26.47	26.74	27.24	27.00	20.45
340		PVH MAINTENANCE SUPERVISOR (7-17-18)	MAINTENANCE	24.47	25.04	25.61	26.17	26.74	27.31	27.88	28.45
335	н	PVH ADMINISTRATIVE ASST	ACCOUNTING	22.37	22.89	23.41	23.93	24.45	24.97	25.49	26.01
		PVH ACTIVITY DIRECTOR	OCCUPATIONAL THERAPY								
			SOCIAL SERVICES								
330	G	PVH FOOD SERVICE SUPERVISOR	DIETARY	20.26	20.73	21.20	21.68	22.15	22.62	23.09	23.56
		PVH MANAGER OF INFO SYSTEMS (Res 19-									
		82)	MEDICAL RECORDS								
		PVH LPN Res 19-135	LICENSED PRAC NURSES								
225	E			10 16	10 50	10.01	10.42	10.95	20.20	20.70	21.12
325				18.10	10.33	19.01	19.43	19.05	20.20	20.70	21.12
	-										
320	E	FISCAL CLERK	ACCOUNTING	16.06	16.44	16.81	17.19	17.56	17.93	18.31	18.68
		PVH MAINTENANCE WORKER	MAINTENANCE								
		PVH MEDICATION AIDE (Res. No. 18-69)	LICENSED PRAC NURSES								
		PVH UNIT CLERK (7-17-18)	NURSING ASSISTANTS			1					
		DVH NURSING ADMIN ASST Ros 10-125	NUPSING ASSISTANTS								
		T VIT NORSING ADMINI ASST RES 15 155	Nonsing AssistAnts								
	-										
315	D	PVH CNA NURSING ASSISTANT	NURSING ASSISTANTS	13.97	14.29	14.62	14.94	15.27	15.59	15.92	16.24
		PVH CLERICAL ASSISTANT I (7-17-18)	ADMINISTRATION								
		PVH HOUSEKEEPER LEAD	HOUSEKEEPING								
		PVH LEAD COOK (Res. No. 18-68)	DIETARY								
		PVH UNIT CLERK	CBRE								
210	C			12.02	12.24	12 54	12.04	1 1 1 1	14.44	1474	15.04
510	L	PVHACTIVITTAIDE	OCCOPATIONAL THERAPT	12.95	15.24	15.54	15.04	14.14	14.44	14.74	15.04
	-										
305	В	PVH COOK I	DIETARY	11.98	12.26	12.54	12.82	13.09	13.37	13.65	13.93
		PVH FOOD SERVICE WORKER II	DIETARY								
		PVH PERSONAL CARE WORKER	CBRF								
		RESIDENT ASSISTANT	PINE VALLEY								
300	•		DIFTARY	11.00	11 25	11.61	11 97	12 12	12 20	12.64	12 00
300	А			11.09	11.35	11.01	11.0/	12.13	12.30	12.04	12.90
			HUUSEKEEPING								
		PVH LAUNDRY WORKER	LAUNDRY								
				BASE RATE		CALL-IN					
	RESOLU	ITIONS FOR CALL-INS		STEP 5		RATE					
	17-80	PVH CNA NURSING ASSISTANT CALL IN	NURSING ASSISTANTS	1		17 50					
	19 70			17 10	ב א מווום	20.10					
	10 - 10	T VIT WIEDICATION AIDE - KES 18-69	LICENSED PRAC NUKSES	1/.19	FLU3 \$5	20.19		-			
	18-70	PVH LPN	LICENSED PRAC NURSES	20.28	PLUS \$4	24.28					
	18-70	PVH REGISTERED NURSE	REGISTERED NURSES	26.17	PLUS \$5	31.17					
	20-13	PVH CNA NURSING ASSISTANT CALL IN	NURSING ASSISTANTS			18.50					
	20-12	PVH LPN	LICENSED PRAC NURSES			26.15					
	20-12	PVH REGISTERED NURSE	REGISTERED NURSES			34.04					
						5-1.04		-			
		Adapted Dec. No. 40 (7 (7 (7 10))									
		Auoptea kes. No. 18-97 (7-17-18)									
	1	Amended Res No. 19-89		1		1					

APPENDIX Y: PROPOSED CHANGES TO COMPENSATION POLICY

This form is intended to be used for submission of proposed changes of the Employee Handbook in accordance with Section 1.

Section	Applicable Language	Issue or Concern Noted	Resolution Proposed

APPENDIX Z: POLICY REVIEW FORM

This form is intended to be used in compliance with the Richland County Policy Establishment Policy in ensuring that administration is reviewing policy prior to adoption.

Completed by Policy Custodian

Policy Title						
Overview of Adoption/Revision						
Policy Submitted By						
Policy Submitted To						
Anticipated Date of Policy Final Approval						

Completed by Administrator

Policy Received On	
Policy Reviewed	
Policy Approved/Denied By	
Policy Storage Location	
Policy Forwarded to Corporation Counsel	

Completed by Corporation Counsel

Policy Received On	
Policy Reviewed:	
Policy Approved/Denied By	
Policy Forwarded to Administrator	