



Western Regional Maintenance Operations and Facility Support

Operation Review

November 26, 2007

Western Regional Maintenance is not meeting the full needs of its customers:

- *J. Iverson Riddle Neuro-Medical Treatment Center (JIRNMTC)*
- *Broughton Hospital*
- *North Carolina School for the Deaf (NCSD)*

Executive Summary

The Department of Health and Human Services (DHHS) consolidated maintenance operations in Morganton without developing a detailed plan specific to the location. The resulting organization does not meet the full needs of its customers and has alienated many senior employees.

In 2002, the North Carolina General Assembly directed DHHS to develop a plan to consolidate maintenance activities at three facilities in Morganton, North Carolina. During the same year, the Governor's Commission to Promote Government Efficiency and Savings on State Spending was charged with identifying "long-run efficiencies." In its final report, published in December 2002, the Commission recommended the consolidation of administrative and support functions in areas of high concentration of state facilities and specifically mentioned the plan being developed for the Morganton area.

In 2003, DHHS began consolidation of its maintenance operations in the Morganton area, instituting a single budget in August, and completing implementation in early 2004. DHHS created an organization to manage the consolidated maintenance operation, Western Regional Maintenance (WRM).

Members of the General Assembly expressed concerns about the implementation of the consolidation and requested Fiscal Research Division (FRD) conduct a review of the WRM operation.

The review team developed several major findings:

- Western Regional Maintenance has a talented, dedicated staff working diligently to provide maintenance for the three facilities.
- Most facilities' management does not believe consolidation has improved their maintenance support.
- Detailed planning would have made consolidation more effective.
- Consolidation, as implemented, has adversely impacted the morale of long-term employees.
- There is no compelling evidence that consolidation has increased efficiency or effectiveness of maintenance services.

The FRD team developed a list of options for consideration, based on their findings:

- Develop an organization that is more responsive to customers by flattening the management structure and requiring WRM to report to a local facility director.
- Make a concerted effort to improve employee relations by reviewing pay, better-explaining hiring decisions, and involving maintenance personnel in planning WRM operations.
- Improve efficiency of operations by making repair and replacement parts more accessible, planning work orders to minimize travel, and recognizing employees' contributions and ideas.



SCOPE AND METHODOLOGY OF REVIEW

The purpose of this review was to determine if consolidation of the maintenance operations in Morganton, North Carolina, for Broughton Hospital, the North Carolina School for the Deaf, and the J. Iverson Riddle Neuro-Medical Treatment Center has resulted in improvements in efficiency and effectiveness. This review was conducted at the request of members of the North Carolina General Assembly, based on concerns expressed by their constituents.

A team of FRD analysts conducted the review in four phases:

- Members of the team visited the Department of Administration Division of Facility Management to gain an understanding of maintenance operations. They visited the Department of Health and Human Services to become familiar with their facilities management procedures. Senior members of the Department were briefed on the planned review before the team traveled to Morganton.
- Team members surveyed maintenance workers and facility management to determine their satisfaction with consolidation. The team then compiled the results in Access to allow the information to be retrieved in whatever form was required.
- Team members visited Morganton to discuss consolidation issues with the maintenance workers, their supervisors, the management of the individual facilities, and interested constituents.
- The team made follow-up requests for additional information and reviewed facilities' budgets prior to and following consolidation.

BACKGROUND

In 2002, the North Carolina General Assembly, through a special provision within the budget bill, directed the Department of Health and Human Services to develop a plan to consolidate maintenance activities in Morganton, North Carolina, at the North Carolina School for the Deaf, the Western Carolina Center (now the J. Iverson Riddle Neuro-Medical Treatment Center), and Broughton Hospital. The Appropriations Subcommittee on Health and Human

Services developed this legislation. The plan required assessment of the needs for maintenance at all three centers, determining the level of staff necessary to carry out all of the current activities with fewer managers, supervisors, and other staff, and developing a new single budget for the maintenance activities. The General Assembly also directed the Department to identify other facilities throughout the State that were in close proximity to each other and assess the feasibility of consolidating the building maintenance activities at those facilities.

The special provision directed DHHS to report back to the Senate Appropriations Committee on Health and Human Services, the House of Representatives Appropriations Subcommittee on Health and Human Services, and the Fiscal Research Division no later than December 1, 2002. DHHS did not provide the level of detail required by the legislation.

During the same year, the Governor's Commission to Promote Government Efficiency and Savings on State Spending was charged with identifying "long-run efficiencies." In its final report, published in December 2002, the Commission recommended the consolidation of administrative and support functions in areas of high concentration of state facilities and specifically mentioned the plan being developed for the Morganton area.

In 2003, DHHS began consolidation of its maintenance operations in the Morganton area, creating a single budget in August, completing implementation in early 2004. DHHS developed an organization to manage the consolidated maintenance operation, Western Regional Maintenance, with the Director reporting directly to Raleigh.

Since the consolidation, a number of the workers have expressed concerns about their ability to support the three facilities. In 2004, these workers contacted the Fiscal Research Division. FRD staff visited the Morganton facilities and met with some WRM employees and the directors of the facilities. During the visit, staff learned that the facility directors also had concerns and felt their needs were not being fully met. FRD staff met with DHHS senior management in Raleigh to discuss these concerns. As a result, DHHS management directed the WRM Director to meet regularly and consult weekly with facility directors to review issues.



In addition, the Chair of the Joint Appropriations Subcommittee on Health and Human Services set up a meeting for the workers of WRM to further discuss their concerns. DHHS managers, several workers from WRM, and members of the Joint Appropriations Subcommittee on Health and Human Services attended the meeting. After that meeting, the Department promised to address the workers' concerns, and the Subcommittee Chairs decided not to pursue additional changes to the WRM operations. In addition, there was another meeting in Morganton with facility directors, local members of the General Assembly, and DHHS management to discuss the directors' concerns. Participants reviewed these concerns, and again, DHHS agreed to conduct regular meetings between WRM and the Directors, and to further refine the system.

Earlier this year, employees of Western Regional Maintenance again contacted their representatives to discuss their concerns. As a result of their requests, General Assembly members asked Fiscal Research Division to conduct a review of DHHS maintenance consolidation in Morganton. The purpose of this review was to determine if the consolidation of the maintenance operations at the three facilities has resulted in improvements in efficiency and effectiveness.

FINDINGS

A. Western Regional Maintenance has a talented, dedicated staff working diligently to provide maintenance for to the three facilities.

- The employees are very proud of what they accomplish and understand the importance of providing the best possible support to their facilities.
- The results of employees' efforts are apparent, as all of the campuses appear well-maintained.
- Employees try to be proactive when there is a critical situation. For example, when an NCSD bus broke down while transporting children, mechanics took it upon themselves to drive a second bus to the site.

B. Most facilities' management does not believe consolidation has improved their maintenance support.

- There is a perception that maintenance decisions are made within WRM, or with the assistance of

DHHS in Raleigh, leaving the directors and staff out of the process.

- WRM was not able to provide the team with any comprehensive written guidance to assist its staff in determining individual facilities' maintenance priorities. While there are written plans developed to comply with Centers for Medicaid and Medicare and Joint Commission on Accreditation of Health Care Organizations requirements, comprehensive guidance that prioritizes requirements at all three locations would alleviate facilities' concerns. The Director of Property and Construction at DHHS told the FRD team that priorities are not established in writing at the State level because the decisions are made at WRM.
- The maintenance budgets for all three facilities were moved to WRM when consolidation occurred, limiting facility directors ability to directly impact maintenance decisions.
- The supported facilities now have no internal capability to perform minor, routine maintenance, such as changing regular light bulbs, and must submit a work order. Workers indicated they are sometimes chastised if they perform routine maintenance prior to receiving a work order.
- The new organization requires the Director of WRM to report directly to a manager in Raleigh, not to local customers.
- Joint, monthly meetings are no longer scheduled between the WRM Director and the facility directors. Quarterly meetings are held with JIRMNTC, but the WRM Director told the FRD team that he does not have the same relationship with the other facilities that he has with JIRNMTC.
- Facility management survey responses indicate a reduced level of support since consolidation.
 - This survey specifically targeted management, although responses were anonymous. It was intended to provide preliminary information on customer satisfaction to allow the team to better prepare to conduct interviews.
 - Twenty responses were received from the three facilities, eight from JIRNMTC, five from Broughton Hospital, and seven from the North Carolina School for the Deaf.
 - On a scale of 1 to 10, respondents gave current maintenance support a 6.1, compared to 8.5 before consolidation.
 - With three exceptions, the 15 respondents who were employed prior to consolidation felt that maintenance support was better before WRM.



Two felt it was better now, and one thought it was the same.

C. Detailed planning would have made consolidation more effective.

- The Department began consolidating operations without the necessary planning. While the Department has some general planning documents and a detailed organizational study of maintenance operations for Dorothea Dix Hospital and the Governor Morehead School, WRM was unable to provide a detailed plan for its implementation of consolidation.
 - Normal procedure when developing a new organization is to define the mission and functions, then develop an organization chart. According to the WRM Director, the Department began by developing a preliminary organization chart.
 - DHHS did not develop the detailed report required by the General Assembly, which could have served as a guide in developing a plan for the consolidated maintenance program.
 - Many experienced workers were not consulted during the consolidation process.
- There appears to have been little effort to prepare workers for the transition.
 - Workers had become experts on their particular facility and its unique systems. Consolidation required them to work on three specialized systems without structured training. As DHHS has pointed out, some of these facilities were built in the 1870's and require specific knowledge.
 - There does not appear to have been any attempt to familiarize employees with specific facilities' cultures or to ensure they understand the unique work environments at different locations. Workers told the FRD team that there was no orientation on the other campuses following consolidation.
- There have been maintenance issues resulting from a lack of familiarity with specific facilities. Two specific examples provided by staff are listed below.
 - At Broughton Hospital, maintenance personnel turned off the wrong valve, leaving the patients without air conditioning.
 - At JIRNMTC, a pipe broke, and it took responding maintenance personnel three hours to find the cutoff.

➤ Equipment located at individual facilities was not inventoried, and no detailed plan was prepared for its proper disposal.

- The machine shop at Broughton Hospital was eliminated. The equipment was stored in unused building space on the campuses. While eliminating the machine shop may have been appropriate as part of the consolidation process, the lack of a detailed plan made the decision appear arbitrary to long-term employees.
- The storage facilities selected may not provide the necessary protection for delicate, high-value equipment.
- Workers indicated movers were not careful when removing equipment from various locations for storage, potentially damaging expensive machines. For example, the team was informed that a drill press was damaged during the moving process.

Note: The Department has disposed of some of the property, and the WRM Director is now being instructed to dispose of the rest.

D. Consolidation has adversely impacted the morale of long-term employees.

- Supervisors thought only "10% or so" of the workers were "disgruntled." Based on attendance at meetings the FRD team held after hours, the percentage appears to be more in the 25% to 30% range.
- Employees seem uncertain about personnel issues, such as compensatory time. One of the WRM supervisors told the FRD team that they had a "hard time" with Human Resources at Broughton Hospital and got conflicting guidance on personnel issues.
- Employees feel that the pool of personnel considered for supervisory positions in the new organization appears to have been limited, alienating experienced workers.
 - Based on the number of personnel who talked to the FRD team, there is a widespread perception that there is favoritism shown in the selection of supervisors and plant supervisors III, who according to the WRM Director, function as deputy directors. Workers with years of experience were passed over for promotion and do not understand why.
 - There does not appear to have been an effort to ensure that each institution was equally



represented on the management team. Most of the supervisory personnel came from the JIRNMTC, the WRM Director's former assignment. The Department's own data shows six from JIRNMTC, four from Broughton, and one from the private sector. Of the most three senior positions, two were filled by personnel from JIRNMTC, and one initially came from the private sector.

- Some of the supervisors appear to lack basic leadership skills. Specifics will be addressed in a presentation to members of the General Assembly.
- Many WRM management personnel received substantial increases following consolidation, while non-supervisory employees were not compensated for increased responsibilities.
 - Supervisory and management personnel received increases from 10% to 44% during the first year of consolidation, although the carpentry and grounds supervisors did not receive increases. Since consolidation, supervisors have received cumulative increases as high as 74%.
 - Most non-supervisory employees did not receive a pay increase when the consolidation occurred.
 - Employees did receive range revisions during 2006 and 2007. Some were initially authorized in 2005 but were not funded. A number of managers also received range revisions.
- FRD staff conducted a survey of WRM workers that identified morale issues.
 - 73 employees responded to the survey, and many included comments.
 - On a scale of 1 to 10, employees ranked their work environment in the 6.0-7.7 range. Those employed prior to consolidation are less satisfied with the current environment than those who began work after consolidation occurred. Morale received an average score of 6 on the 1-10 scale and was the lowest score of the thirteen questions. (Pay received a 6 also). Below are the average responses for questions asked on the survey. The respondents were asked to score their work environments in specific areas from 1 to 10, with 10 being the best.

Friendly Work Environment	7.3
Morale	6
Supervisors provide clear responsibilities and expectations	7.3
Communication of policies	7
Measure of job performance	7.4
Pay	6
Benefits	7.7
Training	7.5
Clear Guidance from Supervisors	7.1
Flexibility in performing job	7.4
Feedback from Supervisors	6.6
Adequate technology to perform job	7.3

- Pay appears to have had an impact on morale; it received the lowest score on the survey (along with morale). In fact, approximately 15 employees indicated they have secondary employment or part-time businesses to supplement their income.
- The employees offered many suggestions to improve morale. Some mentioned more than once include:
 - Encourage supervisors to praise employees; praise our work; better supervision; want to be treated fairly = 36% of the comments
 - Better pay = 26% of the comments

The survey included many comments on ways to save money, those suggestions that were made most frequently include:

- Buy materials in bulk instead of single items at Lowe's
- Organize the warehouse
- Purchase fuel efficient vehicles instead of trucks
- Plan schedules and reduce travel among facilities
- "Sell the junk" (copper, aluminum, etc.)

E. There is no compelling evidence that consolidation has increased efficiency.

The comparison of overall costs before and after consolidation is difficult because some of the "maintenance" budgets in place before

(1-10, with 10 best)	
Work Practices	6.9



consolidation contain other categories (such as “housekeeping”), and it was not possible to develop a good comparison. For example, staff was told by one of the centers that prior to consolidation the maintenance staff were 90% federal funds reimbursable and now that amount is about 35% due to the individuals not working on-site at the facility full-time. Staff could not verify that through the old budget documents.

There is no way to compare volume or quality of work orders completed annually before and after consolidation as information prior to consolidation is limited (has not been provided) and there are no standards in place today to classify completed work orders. For example, a work order that takes one hour to complete is classified in the system as “completed” and one that takes weeks to complete is also classified as “complete.” The maintenance example in which it took hours for an on-call maintenance worker to locate a valve to shut of leaking water is classified as “complete.” In essence, the maintenance of the three facilities was getting done prior to consolidation and it is getting done now; but there is no real data or standards to adequately compare the quality of service. The capability may exist in a new automated work order system that the Department has implemented, but the Director of Property and Construction told the FRD team that although he can monitor the system, he has not done so.

- The Team reviewed the budgets since consolidation to identify any major changes since the first year of consolidation. Overall, the team expected to find increased efficiencies or effectiveness gained from consolidation, (cost savings or other decreased costs resulting from economies of scale); instead, the team found no compelling evidence of either and found budget increases in some line items.
- In FY 2004, there were budget transfers from all three facilities to create the WRM organization and budget. The total amount transferred was \$5,479,369 and in FY 2006-2007; the total expenditures of WRM were \$6,335,738, an increase of 15.6%.

Since 2004, salaries (regular compensation, overtime, shift pay, callback/stand-by pay, longevity and holiday pay) have increased 25%.

	2004	2007	Percent Increase	\$ Increase
Salaries	\$3,013,552	\$3,779,896	25%	\$766,344

During this same time period the legislative increases were less than 15%; see chart below.

	FY2004-05	FY2005-06	FY2006-07
Legislative Salary Increase	2.5% or \$1000 whichever is greater	2.0% or \$850 whichever is greater	5.50%

The additional increases have been primarily in salary increases for supervisory personnel (as identified in finding D, page 4 of this document), an in-range increase for non-supervisory personnel, overtime pay, and call-back/stand-by pay. The overtime pay line item increased 101% from FY2003-2004 to FY2006-2007. The actual amount in FY2003-2004 for overtime pay totaled \$48,610 (according to the State’s budget document DB701 for the period ending June 30, 2004). For FY2006-2007 the overtime expenditures totaled \$97,679 (source – BD701 for June 29, 2007). The callback / stand-by line item increased by 222%, a \$73,000 increase (according to the same source budget documents). The amount expended in FY2003-2004 totaled \$33,278 and in FY2006-2007 the amount totaled \$107,087.

	FY2003-2004	FY2006-2007	Percent Change	Actual \$ Increase
Overtime Pay	\$48,610	\$97,679	101%	\$49,069
Call back/Stand-by Pay	\$33,278	\$107,087	222%	\$73,809

- The expenditures for purchased services have increased 49% since FY2005. The certified budget for FY2004-2005 was \$169,469 for purchased services (BD701, period ending June 29, 2005) and in FY2007 the actual expenditures were \$253,102 (BD701, period ending June 29, 2007). In addition, the customers told the team that WRM asks the directors of facilities to pay for contracted services for maintenance, that prior to consolidation, the facilities would use their own maintenance staff to perform.



- Upon consolidation, WRM renovated an old building located at the NCS D's campus to provide office space for the Director, deputies, and clerical assistants, as well as space for maintaining facility plans. According to the WRM director, this cost was \$30,000.
- The North Carolina School for the Deaf requested a position from the General Assembly to help with maintenance needs. The General Assembly appropriated \$20,358 to give a full time position to the North Carolina School for the Deaf in FY2006-2007. This is a housekeeping position that was to assist with maintenance jobs that prior to consolidation, the maintenance staff would perform.
- The current management structure removes a significant number of personnel from the actual work force.
 - According to the Director, Western Regional Maintenance has three levels of supervisors, a total of eleven personnel, for an organization with 110 personnel, including the following:
 - A director
 - Two plant maintenance supervisors III who supervise three or five trades
 - Eight trade supervisors
 - The plant maintenance supervisors and trade supervisors do not actually work in the trades they supervise.
- The consolidated warehouse, as currently organized, limits access to supplies and equipment.
 - The warehouse is advertised as closed from 12:00-12:30 for the two warehouse employees to have lunch. Staggered lunch time for both maintenance workers and warehouse workers is more ideal to keep maintenance going throughout the day.
 - The warehouse is understood to be unavailable from 11:30-1:30 for the warehouse employees to complete computer orders and work order entries. The warehouse employees have indicated that if necessary, they would provide support during those two hours but need the time to complete administrative requirements.
- Consolidation has increased travel and vehicle wear and tear, as well as adding time to each work order. This is exacerbated by the need to constantly move between facilities and to return to the warehouse at the North Carolina School for the Deaf for major items. (Note: This also creates a requirement to clean up work spaces and then start over upon returning from the warehouse.)

According to WRM's own records, gasoline costs have risen 114% between August 2003 and September 2007. The United States Department of Energy reports gasoline price increases of 82.6% during the same time period. The difference appears to be the additional mileage on the workers' vehicles; however, the team was not provided information with vehicle mileage prior to or post consolidation. Since there are no records on the annual mileage incurred on vehicles prior to consolidation, there is no reliable comparison.

- Many items are purchased at local hardware stores instead of being maintained in the warehouse, which results in even more trips and additional mileage for workers. Trips to the stores also take time away from maintenance work, reducing availability.
- At least one facility has purchased additional tools to replace those transferred to WRM.
- Professional staff at JIRNMT C and NCS D spends time performing tasks that used to be completed by maintenance personnel, such as setting up chairs and preparing for large events. While the team understands that using skilled maintenance workers to perform general maintenance functions is not the best use of their time, substituting professional staff is perhaps not the best alternative.
- Employee survey results indicate workers are aware of the inefficiencies and have offered suggestions for correcting them:
 - Buy in bulk instead of going to hardware stores.
 - Do less contracting.
 - Plan schedules to reduce expenditures for gasoline.
 - Assign employees to primary work facilities to cut down on travel time.

There were additional costs to get the WRM up and running-pay increases for some of the managerial employees, additional travel, and increased overtime pay. These are expenses that did not exist prior to consolidation. The quantity and quality of work completed prior to and after consolidation cannot be measured and adequately compared, as the necessary data does not seem to be available.



OPTIONS

These options are a representative list based on the team's observations during their review of WRM. This list not all-inclusive but reflects a snapshot in time.

Develop an organization that is more responsive to customers.

1. Flatten the organization.
 - a. Eliminate the plant supervisors III and require the supervisors for each trade to work in their area. A DHHS document entitled "Consolidation of Physical Plant Operations," that discussed issues related to the consolidation of maintenance functions, specifically mentions the possibility of savings when supervisors become working supervisors/lead workers.
 - b. The senior trade supervisor can function as a deputy to the Director when required.
 - c. The Director can interface with both the facility directors and the Department of Health and Human Services in Raleigh.
2. Establish regularly scheduled meetings between the WRM Director and all facility directors specifically to discuss and prioritize facility needs.
3. Select individuals for supervisory positions in a trade who have advanced skills in the area. If a license is available, require them to be licensed.
4. Require the Director of WRM to report to a Director of one of the three institutions, instead of Raleigh. The Broughton Hospital Police is an example of a working consolidation effort. The Chief reports to the Director of Broughton Hospital. If the other supported institutions have an issue, they can contact the Chief or the Hospital Director.
5. Designate general maintenance workers for each supported organization to allow them to accomplish simple tasks without submitting a work order to a central location.
6. Develop a mission/vision for the WRM based on customer requirements, and set goals and measurable objectives.
7. Request an auditor to review the bidding/contracting practices of WRM.

Improve Employee Relations

1. Review in-range adjustments for workers and ensure they are aware that this is being done.

2. Explain management hiring decisions to employees who are not selected. Specifically, explain what they can do to improve their qualifications. The WRM Director told the FRD team that supervisors were selected based on longevity and technical skills.
3. Provide a suggestion box for workers and supported organizations, and review the suggestions with the workers and facility directors on a regular basis.
4. Ask workers for their ideas, and incorporate them into WRM operations.
5. Recognize workers for their suggestions, especially if there are cost savings.

Improve Efficiency of Operations

1. Ensure workers understand that the warehouse is open and accessible at all times during regular maintenance hours.
2. Limit trips to hardware stores for supplies to reduce the time workers are not performing maintenance.
3. Plan the weekly/daily work schedules so that workers are not constantly moving from one facility to another.
4. Allow workers to keep frequently used parts on their trucks. Consult workers to determine what parts they think they need to maintain.
5. Allow warehouse personnel to take needed parts to workers at worksites, instead of requiring workers to return to the warehouse. As DHHS is under the impression this already occurs, ensure employees are aware this is an option available to them.
6. Conduct a comprehensive inventory of excess equipment at each facility and determine the proper disposition of each item. (Note: It is FRD's understanding that this is now occurring.)
7. Develop an "Employees Incentive Program" that in small ways recognizes and rewards employees. (The Department of Transportation has a couple of pilots underway currently.) This would take the action of the General Assembly to implement. Employees who recommend cost savings could also receive monetary awards, similar to programs that have been implemented by the Federal Government.

Other Options to Consider

1. It is recommended that the General Assembly address these issues through a special provision within the budget bill during the 2008 session. (Note: The detailed analysis that the General Assembly previously



requested could have prevented the issues identified in this report and precluded the need for a review.)

2. Have the WRM function as an enterprise organization in which the three facilities may purchase services from WRM. The three facilities would have their own maintenance budgets and could decide from whom to purchase services. This would create an incentive for WRM to become more responsive to facilities' needs.

3. Develop standard procedures for determining if work is to be contracted or completed by WRM. WRM currently contracts maintenance work that the workers believe they could perform more efficiently and inexpensively. Painting the new forensic wing of Broughton Hospital is an example. Contract painters were going to be used until funding became an issue. WRM painters are now completing the work.

4. The impact of consolidation on Medicaid receipts needs to be examined. If the State can recover more funding by having individual facilities bill for maintenance expenses, a change needs to be implemented.

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