



DEPARTMENT OF THE AIR FORCE
10TH MEDICAL GROUP
USAF ACADEMY, COLORADO

6 Aug 04

MEMORANDUM FOR HQ AFMSA/SGD

FROM: 10 DS/SGDA
1045 E. Stewart Ave, Bldg 2012
Peterson AFB, CO 80914-9045

SUBJECT: Dental Laboratory IPT Final Report

1. On 15 January 2004 the Dental Operations Panel chartered a Dental Laboratory IPT to study, develop and forward recommendations that optimize the Air Force dental laboratory system (attachment 1) within CONUS. To this end the IPT explored, evaluated and developed 5 primary recommendations, contained in the Executive Summary, that meet the scope and responsibility of their charter as directed by HQ AFMSA/SGD.
2. The Executive Summary, Dental Laboratory IPT: Findings and Recommendations, provides a synopsis of solutions that can improve resource utilization, meet customer needs and enhance mission accomplishment. In addition, the IPT membership identified 4 referred items that have a secondary affect on dental laboratory optimization. If you have any questions or concerns please contact me via telephone or e-mail DSN 834-1600 Randall.Duncan@peterson.af.mil.

A handwritten signature in cursive script, appearing to read "Randall C. Duncan".

RANDALL C. DUNCAN, Col, USAF, DC
Director, Area Dental Laboratory

Attachments:

1. Dental Laboratory IPT Charter
2. Customer Survey
3. Survey Results
4. References
5. Activity-Based Staffing Model
6. Comparative Tables/Decision Matrix
7. Manpower Reallocation
8. Outsourcing Challenges
9. Performance Management
10. Technician Performance Activity Levels



Executive Summary

USAF Dental Laboratory IPT: Findings and Recommendations

The Dental Laboratory IPT was chartered ([Attachment 1](#)) by the Dental Operations Panel to determine how best to posture Air Force dental laboratory assets for the provision of high quality, timely dental laboratory services and products. Specifically, manpower support was evaluated to determine whether more personnel should be located at the points of healthcare delivery (decentralized to Base Dental Laboratories BDLs) or centralized (to ADLs) for economy of scale. The Air Force Area Dental Laboratory (ADL) system is modeled after the U.S. Army's Central Dental Laboratory (CDL) system, which originated in 1952. It is composed of a centralized hub, the ADL, and multiple spokes, the BDLs, located within individual dental clinics. The 'hub and spoke' design has theoretically provided the greatest access to laboratory services along with the greatest efficiency. The ADLs are staffed with the most expensive equipment, highly trained personnel and are accessed by multiple smaller BDLs. Base Dental Laboratories are only partially equipped to provide basic laboratory services and are minimally staffed.

The Laboratory IPT evaluated the efficiency and productivity of this 'hub and spoke' system through different scenarios. To accomplish this, an Activity-Based Staffing (ABS) model had to be developed. This model accounted for the following: the available Air Force manpower pool (number of technicians and their assigned locations); the skill sets of these technicians (to determine their productive capacities), utilization rates (how efficiently their capacities were employed in providing laboratory services), desired cycle times (determined by a survey consensus of AF dentists and laboratory technicians, and known productivity (from existing dental laboratory metric data) ([Attachments 2 and 3](#)). Once the model was developed, manpower scenarios were input to determine the cause and effect relationship between production capacity, labor cost per product hour and cycle time.

Findings within the Laboratory IPT committee's charter are supported with recommendations and proposed solutions. Findings not within this IPT's purview are referred to the Operations Panel for further consideration. Reference documents used in the development of the IPT's recommendations are attached ([Attachment 4](#)).

Chartered Taskings

1. Develop options and determine the best method to provide the most cost-effective dental laboratory support.
2. Recommend the best posture for dental laboratory support.
3. Determine what additional costs or projected savings would be realized by different options.

Findings and Recommendations

1. *Finding*: Several small BDLs are underutilized while many larger BDLs are stretched beyond their production capacities.

Recommendation: Reposition laboratory authorizations to BDLs and the ADL throughout the CONUS AFMS following a centralized model ([Scenario 2](#)). Utilize the Activity-

Based Staffing (ABS) model to configure the most economical and productive balance of manpower at each BDL based on annual production capacity. Staffing needs should be evaluated annually at the Plans and Programs Meeting, utilizing the ABS model to determine the most efficient manning posture. This centralized model of staffing has the potential to recapture over \$500K in lost laboratory costs per product hour ([Attachments 5 and 6](#)). It would require, however, a reallocation of manpower at BDLs, leaving some clinics without local laboratory support ([Attachment 7](#)).

NOTE: This model addresses the assignment needs of CONUS bases only. Recommend that OCONUS bases be included if the Operations Panel wishes to implement this model as a staffing plan.

Implementation: Evaluate laboratory staffing at the Plans and Programs meeting FY05. Evaluate trends and begin reallocation process of manpower positions.

2. Finding: Current AF and DoD laboratory systems cannot meet customers' and Health Affairs' established 28 day access to care standard. BDLs currently transship excess workload capacity to the ADL; however, outlet options for the ADL are nonexistent when prosthodontic demands exceed the ADL's production capacity.

Recommendation: Provide centralized commercial dental laboratory outsourcing option at CONUS ADL in order to control turnaround times during peak workloads, and to establish price realism for determining the value of laboratory services within the dental laboratory industry ([Attachment 8](#)). (Suggested OPR: Peterson ADL)

Implementation: Begin developing performance work statements and other criteria for Request for Proposals in FY06.

3. Finding: Dental Laboratory Weighted Values (DLWVs) are outdated and do not correlate to private sector pricing. They were developed in the 1997 time frame and the Consumer Price Index-Dental has risen considerably over the past 7 years

Recommendation: Reinstate Composite Laboratory Values (CLVs). CLVs are true measures of production and accurately capture the labor content involved in the laboratory manufacturing processes. NOTE: Product costs can be extrapolated on an as needed basis and correlated to CLVs and Federal Labor costs ([Attachment 9](#)).

Implementation: Establish new CLV values for unavailable service codes immediately and begin using CLVs as the MEPRS metric 1 Oct 05.

4. Finding: The framework for the ABS model originated from activity-based management and costing methodology. The activity measurement used in this model was Composite Laboratory Values (CLVs). From the CLVs, Performance Activity Levels (PAL) were established using utilization values and training skill levels to determine productivity for the ABS model.

Recommendation: Utilize the PAL values to identify staffing requirements and to establish performance goals for BDLs ([Attachment 10](#)).

Implementation: Begin using PAL values 1 Oct 05 to identify staffing requirements.

5. Finding: CAD/CAM dental laboratory technology has become a viable option to rapidly produce crown and bridge substructures. Several competing systems are available that will allow a significant leverage of the dental laboratory manpower resource. The potential of this technology to enhance overall productivity, with reduction in case processing times, is substantial.

Recommendation: Establish Peterson ADL as OPR to evaluate and test dental laboratory CAD/CAM technologies.

Implementation: Utilize evaluations as a basis for the estimation of the potential impact upon both manpower and productivity. Identify the most suitable systems that will fulfill ADL requirements. Initiate procurement actions via the RAPIDS process through MAJCOM and Dental Ops Panel if the estimated impact is favorable.

In the final analysis, centralizing AF dental laboratory staffing is the most cost effective and mission efficient option readily available to the AF Dental Services. The laboratory manning authorization process, however, will require regular assessment and adjustment to manpower assignments in order to maintain flexible support of the BDLs' dynamic production requirements. This mirrors the fluid management process required to effectively support and maintain Dental Care Optimization. The remaining recommendations (1-4), address established policy, mission demands and customers' expectations.

Referred Items

1. Finding: Dental schools have decreased the amount of curricula hours provided for prosthodontic training of graduating dentists. New accession dental officers possess insufficient clinical and laboratory skills to deliver prosthodontic care within the scope of a general dental practice.
Recommendation: Establish centralized prosthodontic training for new accession general dental officers so that basic prosthodontic services may be provided. This training should include clinical, laboratory and laboratory communication skills (Refer to PGY-1 IPT).
2. Finding: Enlisted assignment system does not fully support dental laboratory mission. Assignments are made according to rank instead of skill level.
Recommendation: Appoint central program manager to direct Air Force dental laboratory assignments who can match skill sets of individual technicians to mission requirements of specific facilities (Refer to Career Field Dental Enlisted Manager).
3. Finding: Air Force PCS moves and military unique training and tasks have a negative effect upon the ability of dental laboratories to provide timely, consistent, quality dental laboratory products and services.
Recommendation: Increase the number of GS positions within the Air Force Dental Laboratory system to improve the timeliness, consistency and quality of dental laboratory products and services (Refer to Dental Operations Panel).
4. Finding: The CONUS AF ADL provided 13,649 (9,232 Army; 4,417 Navy) production hours of laboratory support to sister service facilities within the last fiscal year. OCONUS ADL's (USAFE and PACAF) provided 2,693 (1,711 Army; 982 Navy) and 8,623 (951 Army; 7,672 Navy) respectively. Concern over continuation of support and service exists due to increasing budget constraints and demands for service.
Recommendation: Initiate open dialogue with sister services to discuss and explore resource sharing, both monetary and manpower, to ensure continued AF-directed laboratory services to CONUS and OCONUS DoD facilities (Refer to Dental Operations Panel).

Dental Lab IPT

Purpose: This charter establishes an IPT that will function under the purview of the Dental Operations Panel. The objective of this IPT is to determine how best to posture our dental laboratory support. Specifically determine whether more personnel should be at the point of healthcare delivery (decentralized to the BDL) or centralized (ADLs) for economy of scale. As part of your deliberations, consider extreme “outside the box” positions, for example: outsourcing; all lab personnel at the BDLs, no ADLs; all lab personnel at the ADLs, none at base level. Assume that quality of product and timeliness of return (as judged by the customer) are the key requirements of any dental lab. Assume the primary customer to be the requesting dentist. The costs/resources required for all positions must be addressed.

Applicability and Scope: This IPT will:

- Develop options and determine the best method to provide dental laboratory support.
- Determine the most cost-effective method to provide dental laboratory support.
- Recommend the best posture for dental laboratory support
- Determine what additional costs or projected savings would be realized by different options
- The key outcome of this IPT is a recommendation about how to provide for a high quality, timely dental laboratory products/service.

Responsibilities:

- Dental Operations Panel to establish the IPT membership with the recommendation of the MAJCOM SGDs and the Consultant to the SG in Dental Laboratories, necessary to meet the established objectives above.
- Collect key information and do analysis.
- Report to the Dental Operations Panel at least monthly on progress.
- Recommend strategy, approach, and guidance.
- Provide a coordinated, comprehensive and balanced plan to the Dental Operations Panel.

Required Completion Date: The IPT will provide an update at least monthly to the Dental Operations Panel. A final report must be provided NLT xxxxxxxx.

USAF Dental Laboratory IPT Members

Col Randall Duncan, Peterson ADL - Chairman
Col Charles DeFreest, Lackland AFB
Col Walter Daniels, Travis AFB
Col Bruce Kennedy, Davis-Monthan AFB
Lt Col Paul Nawiesniak, Moody AFB
Lt Col Barbara King, Bolling
Lt Col Douglas Ford, Kadena ADL
Lt Col Joe Villalobos, Sembach ADL
Maj Donald Sheets, Bolling AFB
Capt Justine Tompkins, Robin AFB
CMSgt Dan Elfring, Peterson ADL
MSgt Andre Dame, Sheppard
TSgt Landon Kendrick, Little Rock AFB
SSgt Scott Beauchamp, USUHS
Mr. Don Meaney, Peterson ADL

Privacy Act Statement

- a. Authority: 10 USC 8012, Secretary of the Air Force, Powers, Duties and Delegation of Compensation.
- b. Principal Purpose: To sample Air Force dental officers and dental laboratory technicians opinion and attitudes concerning dental laboratory services.
- c. Routine Uses: To provide data as part of dental laboratory services study.
- d. Participation in this questionnaire is voluntary and respondents will not be identified.
- e. No adverse action of any kind may be taken against any individual who elects not to participate in any or all parts of this questionnaire.

Questionnaire Instructions

1. Do not place your name or social security number on the response sheets.
 2. There are no right or wrong responses, what matters most are your observations and expectations.
 3. Please place an X or number, which ever applies, in the appropriate box. Comments can be placed in the text box areas—you must click inside the box before you begin to fill in these areas.
 4. ***Upon completion, please return your answer sheets via e-mail to Colonel Randall Duncan DSN 834-1600/1603; Comm: (719) 556-1600/1603; e-mail Randall.Duncan@peterson.af.mil NLT 31 Mar 04.***
 5. ***Thank you for your time and cooperation. Your feedback will make a difference.***
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Questionnaire of Air Force Dental Laboratory Services



Thank you for taking time from your busy schedule to complete this questionnaire. Please rest assured your responses will be used only to improve dental laboratory services. If you have any questions please contact Colonel Randall Duncan DSN 834-1600/1603; Comm: (719) 556-1600/1603; e-mail Randall.Duncan@peterson.af.mil, Lt Col Douglas Ford e-mail Douglas.Ford@kadena.af.mil; Lt Col Joe Villalobos e-mail Joe.Villalobos@sembach.af.mil.

Place an X or number, which ever applies, in the appropriate box. Comments can be placed in the text box areas—you must click inside the box before you begin to fill in these areas.

1. Which branch of the Department of Defense are you assigned?

<input type="checkbox"/> USAF	<input type="checkbox"/> USA	<input type="checkbox"/> USN	<input type="checkbox"/> Other
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2. What is your current area of dental practice?

<input type="checkbox"/> Prosthodontist	<input type="checkbox"/> Oral Surgeon
<input type="checkbox"/> Orthodontist	<input type="checkbox"/> Pediatric Dentist
<input type="checkbox"/> General Dentist	<input type="checkbox"/> Dental Laboratory Technician
<input type="checkbox"/> Other	

3. Do you use Area Dental Laboratory (ADL) Services?

<input type="checkbox"/> Yes	<input type="checkbox"/> No (If no skip to question 7)
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4. How often do you utilize the ADL?

<input type="checkbox"/> Weekly	<input type="checkbox"/> Monthly	<input type="checkbox"/> Occasionally (6-11 times a year)	<input type="checkbox"/> Rarely (< 6 times a year)
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5. Which mailing system(s) do you use to send casework to the ADL (check all that apply)?

<input type="checkbox"/> Fed Ex	<input type="checkbox"/> DHL	<input type="checkbox"/> US Postal Service	<input type="checkbox"/> BITS	<input type="checkbox"/> Other	<input type="checkbox"/> Don't know
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6. Please rank order your top three choices for utilizing ADL services.

<input type="checkbox"/> Product quality	<input type="checkbox"/> Mailing time
<input type="checkbox"/> Product timeliness	<input type="checkbox"/> Base Lab lacks necessary resources
<input type="checkbox"/> Previous experience	<input type="checkbox"/> Case management
<input type="checkbox"/> Consultative services	<input type="checkbox"/> Other (please elaborate below)

Comments:

7. Please identify your top three reasons you *do not* use ADL services.

	Product quality		Mailing Time
	Product timeliness		Base Lab meets my needs
	Previous experience		Case management
	Consultative services		Other (<i>please elaborate below</i>)
	Submission Standards		

Comments:

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8. What are your frustrations with ADL services?

	Locating ADL Submission Standards		Missing Items Upon Receipt
	Meeting ADL Submission Standards		Damage to Cases in Transit
	ADL Following/Understanding Instructions		Other (<i>please elaborate below</i>)
	ADL Shipping/Receiving Case Process		

Suggestions to improve working relationship with ADL:

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9. What is your current appointment availability window?

(Calendar days include weekends and holidays)

	1-7 calendar days		22-28 calendar days
	8-14 calendar days		29-35 calendar days
	15-21 calendar days		36 + calendar days

10. What is an acceptable product fabrication time for each type of casework?

(Calendar days include weekends and holidays--does not include mailing time)

A. Simple fixed casework (*1-3 units*)

	1-7 calendar days		22-28 calendar days
	8-14 calendar days		29-35 calendar days
	15-21 calendar days		36 + calendar days

B. Complex fixed casework (*4+ units and implant cases*)

	1-7 calendar days		22-28 calendar days
	8-14 calendar days		29-35 calendar days
	15-21 calendar days		36 + calendar days

Question 10 continued: What is an acceptable product fabrication time for each type of casework?

C. Fixed Full Mouth Rehabs

	1-7 calendar days		22-28 calendar days
	8-14 calendar days		29-35 calendar days
	15-21 calendar days		36 + calendar days

D. RPD frameworks

	1-7 calendar days		22-28 calendar days
	8-14 calendar days		29-35 calendar days
	15-21 calendar days		36 + calendar days

E. Acrylic and orthodontic cases

	1-7 calendar days		22-28 calendar days
	8-14 calendar days		29-35 calendar days
	15-21 calendar days		36 + calendar days

11. Does the ADL information letter contain relevant information (check all that apply)?

	Laboratory techniques and procedures		Lab management information
	New products and services		Do not receive
	Clinical techniques and procedures		Other (please elaborate below)

12. What, if anything, would you change regarding ADL newsletter content or distribution?

13. How often do you attend the ADL workshop?

<input type="checkbox"/>	Annually	<input type="checkbox"/>	Biannually	<input type="checkbox"/>	Once every 3 years	<input type="checkbox"/>	Once every 5 years	<input type="checkbox"/>	Never
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14. What are the most beneficial continuing education topics of the Workshop (check all that apply)?

	Laboratory lectures		Clinical lectures
	Laboratory hands-on courses		Clinical hands-on courses
	Lab management information		Vendor products and displays

15. What, if anything, would you change regarding the ADL workshop?

16. Why do you use the BDL (please prioritize)?

<input type="checkbox"/>	Product quality	<input type="checkbox"/>	Proximity
<input type="checkbox"/>	Product timeliness	<input type="checkbox"/>	Do not use
<input type="checkbox"/>	Case Management	<input type="checkbox"/>	Other (please elaborate below)

Comments:

17. Is your BDL appropriately staffed (consider both number and skill-level of lab technicians)?

<input type="checkbox"/>	Yes (If yes skip to question 19)	<input type="checkbox"/>	No (please check all that apply)
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<input type="checkbox"/>	Authorized staffing insufficient to meet demands
<input type="checkbox"/>	Authorized skill-sets insufficient to meet demands
<input type="checkbox"/>	Rarely staffed to authorized manning
<input type="checkbox"/>	Never staffed to authorized manning
<input type="checkbox"/>	Over staffed compared to authorized manning

Comments:

18. How many years laboratory experience does your NCOIC possess?

<input type="checkbox"/>	0-3 years	<input type="checkbox"/>	5-8 years
<input type="checkbox"/>	3-5 years	<input type="checkbox"/>	9+ years

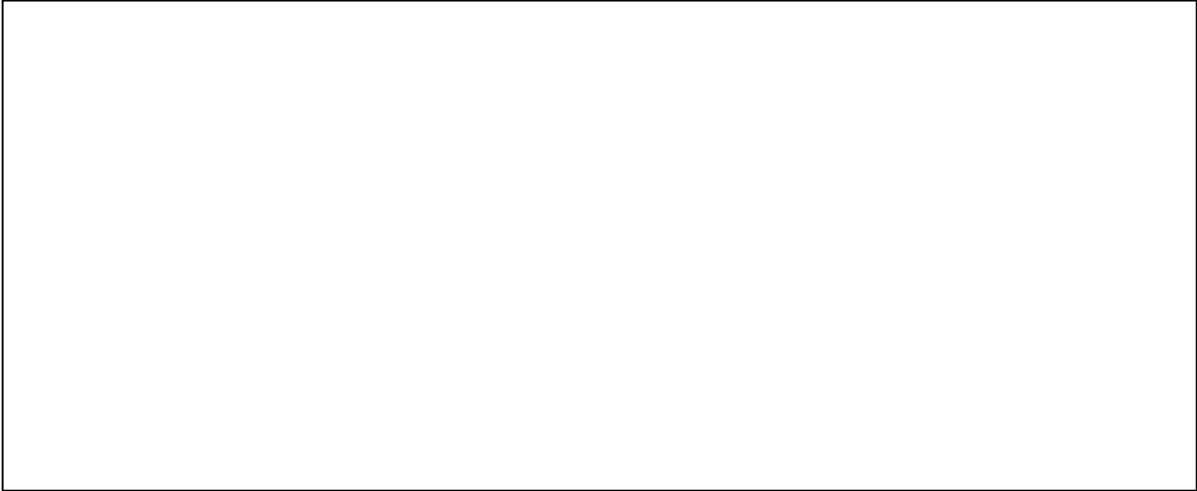
19. Is your BDL staff utilized outside the laboratory?

<input checked="" type="checkbox"/>	Yes (please check all that apply)	<input type="checkbox"/>	No (If no please skip to last question)
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	<i>Areas personnel spend outside the laboratory</i>	<i>Percentage lost per month</i>
<input type="checkbox"/>	Dental clinic taskings and duties	50/ month
<input type="checkbox"/>	Squadron taskings and duties	/ month
<input type="checkbox"/>	Medical Group taskings and duties	/ month
<input type="checkbox"/>	Wing taskings and duties	/ month
<input type="checkbox"/>	Working outside lab but on Unit Manning Document	/ month
<input type="checkbox"/>	Other	/ month

Comments:

20. What products or services would you like to see the ADL provide?



21. What, if anything, would you change in the Air Force Dental Laboratory System?



SURVEY RESULTS

Questionnaire of Air Force Dental laboratory

4-Apr-04

1. Which branch of the DoD are you assigned?

Branch	Count	Percent
USAF	232	89.2%
USA	16	6.2%
USN	10	3.8%
Other	2	0.8%

2. What is your current area of dental practice?

Specialty	Count	Percent
Prosthodontist	31	8.8%
Orthodontist	15	4.3%
General Dentist	201	57.1%
Oral Surgeion	8	2.3%
Pediatic Dentist	4	1.1%
Dental Laboratory Technician	84	23.9%
Other	9	2.6%

Sorted	
Specialty	Percent
General Dentist	57.1%
Dental Laboratory Technician	23.9%
Prosthodontist	8.8%
Orthodontist	4.3%
Other	2.6%
Oral Surgeion	2.3%
Pediatic Dentist	1.1%

3. Do you use Area Dental laboratory (ADL) Services?

Answer	Count	Percent
Yes	246	71.3%
No	99	28.7%

4 How often do you utilize the ADL?

Frequency	Count	Percent	Cumulative
Weekly	51	21.1%	21.1%
Monthly	71	29.3%	50.4%
Occasionally (6-11 times a year)	59	24.4%	74.8%
Rarely (<6 times a year)	61	25.2%	100.0%

5. Which mailing system(s) do you use to send casework to the ADL? (Check all that apply)

Shipper	Count	Percent
Fed Ex	113	49.6%
DHL	4	1.8%
US Postal Service	18	7.9%
BITS	8	3.5%
Other	51	22.4%
Don't Know	34	14.9%

Shipper	Percent
Fed Ex	49.6%
Other	22.4%
Don't Know	14.9%
US Postal Service	7.9%
BITS	3.5%
DHL	1.8%

6. Please rank order your top three choices for utilizing ADL services?

ADL Attributes	Simple Count (All)	Nominal Count	Rank order			Weighted Score	Weighted Percentage
			1	2	3		
Product Quality	125	18	48	39	20	260	25.8%
Product Timeliness	48	9	7	21	11	83	8.3%
Previous Experience	78	8	8	25	37	119	11.8%
Consultative Services	33	8	2	4	19	41	4.1%
Mailing Time	16	9		3	4	19	1.9%
Base Lab lacks necessary resources	160	20	106	18	16	390	38.8%
Case Management	37	6	4	14	13	59	5.9%
Other	19	4	6	4	5	35	3.5%

Note: Nominal count refers to individuals who did not prioritize selections. Weighted score; 1st selection = 3 pts., 2nd = 2 points, 3rd = 1 point. Nominal counts received 1 point.

Sorted ADL Attributes	Weighted Percentage
Base Lab lacks necessary resources	38.8%
Product Quality	25.8%
Previous Experience	11.8%
Product Timeliness	8.3%
Case Management	5.9%
Consultative Services	4.1%
Other	3.5%
Mailing Time	1.9%

Comments are on a separate document.

7. Please identify your top three reasons you do not use ADL Services.

ADL Negatives	Count	Percentage
Product quality	48	8.5%
Product timeliness	121	21.4%
Previous experience	31	5.5%
Consultative services	12	2.1%
Submission standards	12	2.1%
Mailing time	83	14.7%
Base Lab meets my needs	169	29.9%
Case management	37	6.5%
Other	52	9.2%

Sorted ADL Negatives	Percentage
Base Lab meets my needs	29.9%
Product timeliness	21.4%
Mailing time	14.7%
Other	9.2%
Product quality	8.5%
Case management	6.5%
Previous experience	5.5%
Consultative services	2.1%
Submission standards	2.1%

Comments are on a separate document.

8. What are your frustrations with ADL Services?

Frustrations	Count	Percent
Locating ADL Submission Standards	12	6.2%
Meeting ADL Submission Standards	18	9.3%
ADL Following/Understanding Instructions	42	21.6%
ADL Shipping/Receiving Case Process	40	20.6%
Missing Items Upon Receipt	14	7.2%
Damage to Cases in Transit	7	3.6%
Other	61	31.4%

Sorted Frustrations	Percent
Other	31.4%
ADL Following/Understanding Instructions	21.6%
ADL Shipping/Receiving Case Process	20.6%
Meeting ADL Submission Standards	9.3%
Missing Items Upon Receipt	7.2%
Locating ADL Submission Standards	6.2%
Damage to Cases in Transit	3.6%

Suggestions to improve working relationship with ADL, are on a separate document?

9. What is your current appointment availability Window?

Appointment Lead Time	Count	Percent	Cumulative
1-7 calendar days	22	7.3%	7.3%
8-14 calendar days	70	23.1%	30.4%
15-21 calendar days	91	30.0%	60.4%
22-28 calendar days	67	22.1%	82.5%
29-35 calendar days	42	13.9%	96.4%
36+ calendar days	11	3.6%	100.0%

60.4%	1-21 Calendar days	30.4%	1-14 Calendar days
39.6%	22-36+ Calendar days	52.1%	15-28 Calendar days
		17.5%	29-36+ Calendar days

10. What is an acceptable product fabrication time for each type of casework?
(Calendar days include weekends and holidays--does not include mailing time.)

A. Simple fixed casework (1-3 units)

Desired Timeline	Count	Percent	Cumulative
1-7 calendar days	31	9.8%	9.8%
8-14 calendar days	161	50.9%	60.8%
15-21 calendar days	96	30.4%	91.1%
22-28 calendar days	22	7.0%	98.1%
29-35 calendar days	6	1.9%	100.0%
36+ calendar days			

91.1%	1-21 Calendar days	60.8%	1-14 Calendar days
8.9%	22-36+ Calendar days	37.3%	15-28 Calendar days
		1.9%	29-36+ Calendar days

B. Complex fixed casework (4+ units and implant cases)

Desired Timeline	Count	Percent	Cumulative
1-7 calendar days	2	0.7%	0.7%
8-14 calendar days	47	15.4%	16.0%
15-21 calendar days	128	41.8%	57.8%
22-28 calendar days	94	30.7%	88.6%
29-35 calendar days	27	8.8%	97.4%
36+ calendar days	8	2.6%	100.0%

57.8%	1-21 Calendar days	16.0%	1-14 Calendar days
42.2%	22-36+ Calendar days	72.5%	15-28 Calendar days
		11.4%	29-36+ Calendar days

C. Fixed Full Mouth Rehabs

Desired Timeline	Count	Percent	Cumulative
1-7 calendar days			
8-14 calendar days	12	4.6%	4.6%
15-21 calendar days	20	7.6%	12.2%
22-28 calendar days	71	27.0%	39.2%
29-35 calendar days	95	36.1%	75.3%
36+ calendar days	65	24.7%	100.0%

12.2%	1-21 Calendar days	4.6%	1-14 Calendar days
87.8%	22-36+ Calendar days	34.6%	15-28 Calendar days
		60.8%	29-36+ Calendar days

D. RPD frameworks

Desired Timeline	Count	Percent	Cumulative
1-7 calendar days	13	4.6%	4.6%
8-14 calendar days	109	38.7%	43.3%
15-21 calendar days	107	37.9%	81.2%
22-28 calendar days	40	14.2%	95.4%
29-35 calendar days	12	4.3%	99.6%
36+ calendar days	1	0.4%	100.0%

81.2%	1-21 Calendar days	43.3%	1-14 Calendar days
18.8%	22-36+ Calendar days	52.1%	15-28 Calendar days
		4.6%	29-36+ Calendar days

E. Acrylic and orthodontic cases

Desired Timeline	Count	Percent	Cumulative
1-7 calendar days	79	26.2%	26.2%
8-14 calendar days	151	50.0%	76.2%
15-21 calendar days	53	17.5%	93.7%
22-28 calendar days	17	5.6%	99.3%
29-35 calendar days	2	0.7%	100.0%
36+ calendar days			

93.7%	1-21 Calendar days	76.2%	1-14 Calendar days
6.3%	22-36+ Calendar days	23.2%	15-28 Calendar days
		0.7%	29-36+ Calendar days

11. Does the ADL information letter contain relevant information (check all that apply)?

Contents of ADL Information Letter	Count	Percentage
Laboratory techniques and procedures	130	23.6%
New products and services	123	22.3%
Clinical techniques and procedures	102	18.5%
Lab management information	88	16.0%
Do not receive	102	18.5%
Other.	6	1.1%

12. What, if anything, would you change regarding ADL newsletter content or distribution?

Comments are on a separate document.

13. How often do you attend the ADL workshop?

Workshop Attendance	Count	Percentage
Annually	63	19.0%
Bi-annually	34	10.3%
Once every 3 years	40	12.1%
Once every 5 years	42	12.7%
Never	152	45.9%

Sorted	
Workshop Attendance	Percentage
Never	45.9%
Annually	19.0%
Once every 5 years	12.7%
Once every 3 years	12.1%
Bi-annually	10.3%

14. What are the most beneficial continuing education topics of the Workshop (check all that apply)?

Workshop Topics	Count	Percentage
Laboratory Lectures	79	19.2%
Laboratory hands-on courses	78	19.0%
Lab management information	50	12.2%
Clinical Lectures	85	20.7%
Clinical Hands-on courses	41	10.0%
Vendor products and displays.	78	19.0%

15. What, if anything, would you change regarding the ADL workshop?

Comments are on a separate document.

16. Why do you use the BDL (please prioritize)?

BDL Attributes	Simple Count (All)	Nominal Count	Rank order			Weighted Score	Weighted Percentage
			1	2	3		
Product quality	175	41	44	41	49	304	22.7%
Product timeliness	180	39	32	63	46	307	22.9%
Case Management	133	35	17	34	47	201	15.0%
Proximity	234	54	107	43	30	491	36.6%
Do not use	15	9	5		1	25	1.9%
Other	12	9	1		2	14	1.0%

Note: Nominal count refers to individuals who did not prioritize selections. Weighted score; 1st selection = 3 pts., 2nd = 2 points, 3rd = 1 point. Nominal counts received 1 point.

Comments are on a separate document.

17. Is your BDL appropriately staffed (consider both number and skill-level of lab technicians)?

Answer	Count	Percent
Yes	146	54.3%
No	123	45.7%

Comments are on a separate document.

	Count	Percent
Authorized staffing insufficient to meet demands	66	34.6%
Authorized skill-sets insufficient to meet demands	66	34.6%
Rarely staffed to authorized manning	40	20.9%
Never staffed to authorized manning	18	9.4%
Over staffed compared to authorized manning	1	0.5%

Comments are on a separate document.

18. How many years laboratory experience does your NCOIC possess?

Experience	Count	Percent	Cumulative
0-3 years	13	5.4%	5.4%
3-5 years	28	11.7%	17.2%
5-8 years	43	18.0%	35.1%
9+ years	155	64.9%	100.0%

Experience	Percent
0-8 Years	35.1%
9+ Years	64.9%

19. Is your BDL staff utilized outside the laboratory?

Answer	Count	Percent
Yes	142	73.2%
No	52	26.8%

Outside Utilization	Count	f(Selection)	Time Lost in Month	168 Hour
				Duty Month
1. Dental clinic taskings and duties	157	38.3%	18%	31
2. Squadron taskings and duties	53	12.9%	10%	17
3. Medical Group taskings and duties	213	52.0%	10%	17
4. Wing taskings and duties	110	26.8%	7%	13
5. Reassigned but on laboratory UMD	24	5.9%	100%	
6. Other	10	2.4%	10%	16
7.No.	0	0%	0%	0

Comments are on a separate document.

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Activity-Based Staffing Model Base Realignment Scenarios

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DEFINITIONS

ET- Enabling Tasks (ET) are activities that support or lead up to the execution of Mission Essential Tasks (METS). ETs are "quick" turn around taskings the provider would expect to be performed immediately, such as pouring up impressions.

MET- Mission Essential Tasks (MET) are tasks that conclude in definitive care to the patient, such as a crown.

Federal Labor Cost per Product Hour - This resource input/driver is associated with the market value of the total outputs for the period, as the aggregated market value of the goods and services provided must exceed this resource cost. This labor resource cost, in other words, is a constituent part of the final price determination for the delivered product or service. The setting of the market price for the specific, individual goods and services provided, must in the volumetric aggregate, cover this resource cost as well as other associated fixed and variable operating costs of the dental laboratory.

R-BDL – A base dental laboratory that supports a residency program.

Scenario 1: Baseline, Current Force Structure and Performance History

		1 If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Altus BDL	Baseline		1		1	80%	\$4,400	\$71.47	49	12.3	4.2	5.9
	Baseline		1		1	80%	\$4,400	\$71.47	49	12.3	4.2	5.9
Andrews BDL	Baseline	5		1	6	80%	\$33,576	\$70.04	383	14.2	4.9	6.8
	Baseline	5		1	6	80%	\$33,576	\$70.04	383	14.2	4.9	6.8
Barksdale R-BDL	Baseline		2	3	5	80%	\$18,290	\$57.30	273	23.1	7.9	11.0
	Baseline		2	3	5	80%	\$18,290	\$57.30	273	23.1	7.9	11.0
Beale BDL	Baseline		2		2	80%	\$8,800	\$77.36	91	12.0	4.1	5.7
	Baseline		2		2	80%	\$8,800	\$77.36	91	12.0	4.1	5.7
Bolling R-BDL	Baseline	1	6	1	8	80%	\$35,645	\$72.65	393	12.7	4.3	6.1
	Baseline	1	6	1	8	80%	\$35,645	\$72.65	393	12.7	4.3	6.1
Brooks BDL	Baseline	1	1		2	80%	\$10,482	\$125.73	67	5.6	1.9	2.7
	Baseline	1	1		2	80%	\$10,482	\$125.73	67	5.6	1.9	2.7
Cannon BDL	Baseline	2			2	80%	\$12,165	\$73.05	133	12.9	4.4	6.1
	Baseline	2			2	80%	\$12,165	\$73.05	133	12.9	4.4	6.1
Charleston BDL	Baseline	1		1	2	80%	\$9,246	\$62.70	118	17.2	5.9	8.2
	Baseline	1		1	2	80%	\$9,246	\$62.70	118	17.2	5.9	8.2
Columbus BDL	Baseline		1		1	80%	\$4,400	\$81.73	43	11.0	3.7	5.2
	Baseline		1		1	80%	\$4,400	\$81.73	43	11.0	3.7	5.2
Davis Montham BDL	Baseline	3	2	1	6	80%	\$30,211	\$77.42	312	12.5	4.3	6.0
	Baseline	3	2	1	6	80%	\$30,211	\$77.42	312	12.5	4.3	6.0

Scenario 1: Baseline, Current Force Structure and Performance History

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distribution (Hours)			Baseline	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
3.2	1:08	1:12	2:20	18	49		29	Baseline	Altus BDL
3.2				18	49		29	Baseline	
24.3	5:30	12:46	18:16	127	383		48	Baseline	Andrews BDL
24.3				127	383		48	Baseline	
12.2	4:00	8:59	12:59	0	273		16	Baseline	Barksdale R-BDL
12.2				0	273		16	Baseline	
6.4	1:34	2:45	4:20	43	91		30	Baseline	Beale BDL
6.4				43	91		30	Baseline	
25.6	8:06	10:35	18:42	145	393		64	Baseline	Bolling R-BDL
25.6				145	393		64	Baseline	
7.7	1:32	1:38	3:10	95	67		0	Baseline	Brooks BDL
7.7				95	67		0	Baseline	
9.0	2:11	4:09	6:20	55	133		39	Baseline	Cannon BDL
9.0				55	133		39	Baseline	
6.4	2:03	3:33	5:37	16	118		18	Baseline	Charleston BDL
6.4				16	118		18	Baseline	
3.2	0:47	1:15	2:03	24	43		13	Baseline	Columbus BDL
3.2				24	43		13	Baseline	
21.8	4:43	10:09	14:52	145	312		44	Baseline	Davis Montham BDL
21.8				145	312		44	Baseline	

Scenerio 1: Baseline, Current Force Structure and Performance History

		1 If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Dover BDL	Baseline	2			2	80%	\$12,165	\$81.00	120	10.9	3.7	5.2
	Baseline	2			2	80%	\$12,165	\$81.00	120	10.9	3.7	5.2
Dyess BDL	Baseline	1	1		2	80%	\$10,482	\$106.34	79	7.6	2.6	3.6
	Baseline	1	1		2	80%	\$10,482	\$106.34	79	7.6	2.6	3.6
Edwards BDL	Baseline	1	1	1	3	80%	\$13,646	\$63.70	171	15.8	5.4	7.6
	Baseline	1	1	1	3	80%	\$13,646	\$63.70	171	15.8	5.4	7.6
Eglin R-BDL	Baseline	5	1	3	9	80%	\$44,302	\$80.70	439	12.3	4.2	5.9
	Baseline	5	1	3	9	80%	\$44,302	\$80.70	439	12.3	4.2	5.9
Ellsworth BDL	Baseline	1	1		2	80%	\$10,482	\$84.49	99	9.1	3.1	4.3
	Baseline	1	1		2	80%	\$10,482	\$84.49	99	9.1	3.1	4.3
Kelly BDL	Baseline		1	1	2	80%	\$7,563	\$113.77	53	6.0	2.1	2.9
	Baseline		1	1	2	80%	\$7,563	\$113.77	53	6.0	2.1	2.9
Fairchild BDL	Baseline	1	1	1	3	80%	\$13,646	\$79.01	138	12.4	4.2	5.9
	Baseline	1	1	1	3	80%	\$13,646	\$79.01	138	12.4	4.2	5.9
FE Warren BDL	Baseline	1		1	2	80%	\$9,246	\$55.04	143	23.0	7.8	10.9
	Baseline	1		1	2	80%	\$9,246	\$55.04	143	23.0	7.8	10.9
Goodfellow BDL	Baseline		1		1	80%	\$4,400	\$114.50	31	6.3	2.1	3.0
	Baseline		1		1	80%	\$4,400	\$114.50	31	6.3	2.1	3.0

Scenerio 1: Baseline, Current Force Structure and Performance History

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
9.0	2:12	3:30	5:43	68	120		71	Baseline	Dover BDL
9.0				68	120		Baseline		
7.7	1:31	2:14	3:45	82	79		17	Baseline	Dyess BDL
7.7				82	79		Baseline		
9.6	3:43	4:26	8:10	30	171		26	Baseline	Edwards BDL
9.6				30	171		Baseline		
31.4	6:05	14:50	20:55	219	439		20	Baseline	Eglin R-BDL
31.4				219	439		Baseline		
7.7	2:28	2:15	4:43	62	99		64	Baseline	Ellsworth BDL
7.7				62	99		Baseline		
5.1	1:29	1:02	2:32	54	53		0	Baseline	Kelly BDL
5.1				54	53		Baseline		
9.6	2:11	4:23	6:35	63	138		10	Baseline	Fairchild BDL
9.6				63	138		Baseline		
6.4	2:04	4:44	6:48	0	143		27	Baseline	FE Warren BDL
6.4				0	143		Baseline		
3.2	0:43	0:44	1:27	36	31		6	Baseline	Goodfellow BDL
3.2				36	31		Baseline		

Scenario 1: Baseline, Current Force Structure and Performance History

		1 If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Grand Forks BDL	Baseline	1			1	80%	\$6,082	\$52.29	93	20.7	7.0	9.9
	Baseline	1			1	80%	\$6,082	\$52.29		20.7	7.0	9.9
Hanscom BDL	Baseline		2		2	80%	\$8,800	\$67.62	104	14.0	4.8	6.7
	Baseline		2		2	80%	\$8,800	\$67.62		14.0	4.8	6.7
Hill BDL	Baseline	2	1	1	4	80%	\$19,728	\$130.43	121	6.6	2.2	3.1
	Baseline	2	1	1	4	80%	\$19,728	\$130.43		6.6	2.2	3.1
Hollowman BDL	Baseline	1	1	1	3	80%	\$13,646	\$183.47	60	4.2	1.4	2.0
	Baseline	1	1	1	3	80%	\$13,646	\$183.47		4.2	1.4	2.0
Hurlburt BDL	Baseline	2			2	80%	\$12,165	\$51.72	242	31.0	10.6	14.8
	Baseline	2			2	80%	\$12,165	\$51.72		31.0	10.6	14.8
Keesler R-BDL	Baseline	6	2	6	14	80%	\$64,275	\$128.00	402	7.0	2.4	3.3
	Baseline	6	2	6	14	80%	\$64,275	\$128.00		7.0	2.4	3.3
Kirtland BDL	Baseline	1	2		3	80%	\$14,882	\$64.81	184	14.9	5.1	7.1
	Baseline	1	2		3	80%	\$14,882	\$64.81		14.9	5.1	7.1
Lackland R-BDL	Baseline	22	8	12	42	80%	\$206,974	\$71.59	2313	14.4	4.9	6.9
	Baseline	22	8	12	42	80%	\$206,974	\$71.59		14.4	4.9	6.9
Langley R-BDL	Baseline	1	4	2	7	80%	\$30,009	\$54.13	446	21.2	7.2	10.1
	Baseline	1	4	2	7	80%	\$30,009	\$54.13		21.2	7.2	10.1
Laughlin BDL	Baseline		1		1	80%	\$4,400	\$61.87	57	16.5	5.6	7.9
	Baseline		1		1	80%	\$4,400	\$61.87		16.5	5.6	7.9

Scenerio 1: Baseline, Current Force Structure and Performance History

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
4.5	1:30	2:55	4:26	1	93		4	Baseline	Grand Forks BDL
4.5				1	93				
6.4	2:03	2:53	4:57	30	104		24	Baseline	Hanscom BDL
6.4				30	104				
14.1	1:57	3:48	5:46	175	121		2	Baseline	Hill BDL
14.1				175	121				
9.6	1:09	1:40	2:50	142	60		3	Baseline	Hollowman BDL
9.6				142	60				
9.0	3:33	7:59	11:32	0	242		7	Baseline	Hurlburt BDL
9.0				0	242				
44.8	6:22	12:46	19:08	539	402		23	Baseline	Keesler R-BDL
44.8				539	402				
10.9	3:33	5:11	8:45	45	184		4	Baseline	Kirtland BDL
10.9				45	184				
147.2	30:00	80:13	110:13	778	2313		0	Baseline	Lackland R-BDL
147.2				778	2313				
21.1	7:53	13:21	21:15	0	446		176	Baseline	Langley R-BDL
21.1				0	446				
3.2	0:55	1:47	2:42	10	57		7	Baseline	Laughlin BDL
3.2				10	57				

Scenario 1: Baseline, Current Force Structure and Performance History

		1 If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Little Rock BDL	Baseline	1	1		2	80%	\$10,482	\$52.11	161	20.9	7.1	10.0
	Baseline	1	1		2	80%	\$10,482	\$52.11		20.9	7.1	10.0
Los Angles BDL	Baseline	1			1	80%	\$6,082	\$51.72	140	40.3	13.7	19.2
	Baseline	1			1	80%	\$6,082	\$51.72		40.3	13.7	19.2
Luke BDL	Baseline	2	2		4	80%	\$20,965	\$88.69	189	10.3	3.5	4.9
	Baseline	2	2		4	80%	\$20,965	\$88.69		10.3	3.5	4.9
Malmstrom BDL	Baseline	1	2		3	80%	\$14,882	\$152.65	78	5.0	1.7	2.4
	Baseline	1	2		3	80%	\$14,882	\$152.65		5.0	1.7	2.4
Maxwell BDL	Baseline	2			2	80%	\$12,165	\$51.72	306	46.6	15.9	22.2
	Baseline	2			2	80%	\$12,165	\$51.72		46.6	15.9	22.2
McChord BDL	Baseline	1	1		2	80%	\$10,482	\$64.13	131	15.4	5.3	7.4
	Baseline	1	1		2	80%	\$10,482	\$64.13		15.4	5.3	7.4
McConnell BDL	Baseline	1	1		2	80%	\$10,482	\$64.88	129	14.4	4.9	6.9
	Baseline	1	1		2	80%	\$10,482	\$64.88		14.4	4.9	6.9
McDill BDL	Baseline	2	2		4	80%	\$20,965	\$68.68	244	13.3	4.5	6.3
	Baseline	2	2		4	80%	\$20,965	\$68.68		13.3	4.5	6.3
McGuire BDL	Baseline	3	2		5	80%	\$27,047	\$109.66	197	6.9	2.4	3.3
	Baseline	3	2		5	80%	\$27,047	\$109.66		6.9	2.4	3.3
Minot BDL	Baseline	2	2		4	80%	\$20,965	\$116.46	144	7.8	2.7	3.7
	Baseline	2	2		4	80%	\$20,965	\$116.46		7.8	2.7	3.7

Scenerio 1: Baseline, Current Force Structure and Performance History

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
7.7	2:44	4:55	7:40	0	161		15	Baseline	Little Rock BDL
7.7				0	161			Baseline	
4.5	2:05	4:35	6:41	0	140		9	Baseline	Los Angles BDL
4.5				0	140			Baseline	
15.4	2:52	6:08	9:00	133	189		19	Baseline	Luke BDL
15.4				133	189			Baseline	
10.9	1:28	2:14	3:43	150	78		31	Baseline	Malmstrom BDL
10.9				150	78			Baseline	
9.0	4:22	10:12	14:35	0	306		33	Baseline	Maxwell BDL
9.0				0	306			Baseline	
7.7	2:13	4:00	6:13	31	131		6	Baseline	McChord BDL
7.7				31	131			Baseline	
7.7	2:50	3:18	6:09	32	129		18	Baseline	McConnell BDL
7.7				32	129			Baseline	
15.4	5:14	6:24	11:38	78	244		267	Baseline	McDill BDL
15.4				78	244			Baseline	
19.8	4:14	5:09	9:24	219	197		13	Baseline	McGuire BDL
19.8				219	197			Baseline	
15.4	1:47	5:04	6:51	179	144		7	Baseline	Minot BDL
15.4				179	144			Baseline	

Scenario 1: Baseline, Current Force Structure and Performance History

		1 If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Moody BDL	Baseline	1	1	1	3	80%	\$13,646	\$200.10	55	3.7	1.3	1.8
	Baseline	1	1	1	3	80%	\$13,646	\$200.10				
Mountain Home BDL	Baseline	1		1	2	80%	\$9,246	\$66.61	111	15.6	5.3	7.5
	Baseline	1		1	2	80%	\$9,246	\$66.61				
Nellis R-BDL	Baseline	2	3	1	6	80%	\$28,528	\$54.40	420	20.3	6.9	9.7
	Baseline	2	3	1	6	80%	\$28,528	\$54.40				
Offutt R-BDL	Baseline	5	2		7	80%	\$39,212	\$86.59	362	10.3	3.5	4.9
	Baseline	5	2		7	80%	\$39,212	\$86.59				
Patrick BDL	Baseline	2			2	80%	\$12,165	\$72.98	133	12.5	4.3	6.0
	Baseline	2			2	80%	\$12,165	\$72.98				
Peterson ADL	Baseline	36	20	8	64	80%	\$332,274	\$94.77	2805	14.8	5.0	7.1
	Baseline	36	20	8	64	80%	\$332,274	\$94.77				
Peterson BDL	Baseline	1	2	1	4	80%	\$18,046	\$115.52	125	8.0	2.7	3.8
	Baseline	1	2	1	4	80%	\$18,046	\$115.52				
Pope BDL	Baseline	2	1	1	4	80%	\$19,728	\$133.95	118	5.9	2.0	2.8
	Baseline	2	1	1	4	80%	\$19,728	\$133.95				
Randolph BDL	Baseline	2	1		3	80%	\$16,565	\$51.89	280	24.7	8.4	11.8
	Baseline	2	1		3	80%	\$16,565	\$51.89				
Robbins BDL	Baseline	2	1	1	4	80%	\$19,728	\$67.47	234	15.2	5.2	7.3
	Baseline	2	1	1	4	80%	\$19,728	\$67.47				
Scott R-BDL	Baseline	5	2	1	8	80%	\$42,375	\$86.36	393	9.8	3.4	4.7
	Baseline	5	2	1	8	80%	\$42,375	\$86.36				

Scenerio 1: Baseline, Current Force Structure and Performance History

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
9.6	1:05	1:30	2:36	147	55		29	Baseline	Moody BDL
9.6				147				Baseline	
6.4	2:03	3:14	5:17	23	111		20	Baseline	Mountain Home BDL
6.4				23				Baseline	
20.5	5:56	14:03	19:59	11	420		44	Baseline	Nellis R-BDL
20.5				11				Baseline	
28.8	6:05	11:10	17:15	243	362		10	Baseline	Offutt R-BDL
28.8				243				Baseline	
9.0	2:29	3:52	6:21	55	133		31	Baseline	Patrick BDL
9.0				55				Baseline	
240.6	20:19	113:20	133:40	2249	2805			Baseline	Peterson ADL
240.6				2249				Baseline	
12.8	1:46	4:10	5:57	144	125		6	Baseline	Peterson BDL
12.8				144				Baseline	
14.1	2:18	3:18	5:36	178	118		44	Baseline	Pope BDL
14.1				178				Baseline	
12.2	5:44	7:34	13:19	0	280		29	Baseline	Randolph BDL
12.2				0				Baseline	
14.1	3:24	7:44	11:08	62	234		9	Baseline	Robbins BDL
14.1				62				Baseline	
30.7	8:06	10:35	18:42	253	393		10	Baseline	Scott R-BDL
30.7				253				Baseline	

Scenario 1: Baseline, Current Force Structure and Performance History

		1 If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Seymour Johnson BDL	Baseline	5			5	80%	\$30,412	\$96.63	252	9.1	3.1	4.4
	Baseline	5			5	80%	\$30,412	\$96.63	252	9.1	3.1	4.4
Shaw BDL	Baseline	2	2		4	80%	\$20,965	\$73.84	227	13.0	4.4	6.2
	Baseline	2	2		4	80%	\$20,965	\$73.84	227	13.0	4.4	6.2
Sheppard R-BDL	Baseline	3	4	3	10	80%	\$45,337	\$77.01	471	12.9	4.4	6.2
	Baseline	3	4	3	10	80%	\$45,337	\$77.01	471	12.9	4.4	6.2
Tinker BDL	Baseline	4	1	2	7	80%	\$35,057	\$78.91	355	12.5	4.3	6.0
	Baseline	4	1	2	7	80%	\$35,057	\$78.91	355	12.5	4.3	6.0
Travis R-BDL	Baseline	4	4	3	11	80%	\$51,420	\$57.94	710	18.8	6.4	8.9
	Baseline	4	4	3	11	80%	\$51,420	\$57.94	710	18.8	6.4	8.9
Tyndall BDL	Baseline	1	2		3	80%	\$14,882	\$52.11	303	32.3	11.0	15.4
	Baseline	1	2		3	80%	\$14,882	\$52.11	303	32.3	11.0	15.4
USAF Academy R-BDL	Baseline	3	2	1	6	80%	\$30,211	\$53.86	449	20.5	7.0	9.8
	Baseline	3	2	1	6	80%	\$30,211	\$53.86	449	20.5	7.0	9.8
Vance BDL	Baseline		1		1	80%	\$4,400	\$88.22	40	9.2	3.2	4.4
	Baseline		1		1	80%	\$4,400	\$88.22	40	9.2	3.2	4.4
Vandenburg BDL	Baseline	1			1	80%	\$6,082	\$51.72	121	35.0	11.9	16.7
	Baseline	1			1	80%	\$6,082	\$51.72	121	35.0	11.9	16.7
Whiteman BDL	Baseline	1	2		3	80%	\$14,882	\$114.56	104	7.1	2.4	3.4
	Baseline	1	2		3	80%	\$14,882	\$114.56	104	7.1	2.4	3.4
Wright Patterson R-BDL	Baseline	4	4	1	9	80%	\$45,093	\$81.42	443	11.6	4.0	5.6
	Baseline	4	4	1	9	80%	\$45,093	\$81.42	443	11.6	4.0	5.6
Manning	Current	164	111	61	336					Baseline: Daily Capacity (Hours)		
	Proposed	164	111	61	336		Annualized Federal Labor Costs	Annual Federal Labor Cost for Goods and Services Provided		Proposed: Daily Capacity (Hours)		
	Balance	0	0	0	0							
		Annual Federal Labor Cost					\$20,146,573	\$16,350,089	Baseline			
		Proposed Annual Federal Labor Cost					\$20,146,573	\$16,350,089	Proposed			
		Annual Federal Labor Cost Savings					\$0	\$ -	Savings			

Scenerio 1: Baseline, Current Force Structure and Performance History

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	Seymour Johnson BDL
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
22.4 22.4	3:57	8:01	11:59	219 219	252 252		3	Baseline Baseline	Seymour Johnson BDL
15.4 15.4	3:29	7:19	10:49	95 95	227 227		106	Baseline Baseline	Shaw BDL
32.0 32.0	7:02	15:24	22:26	201 201	471 471		31	Baseline Baseline	Sheppard R-BDL
25.0 25.0	5:03	11:52	16:56	169 169	355 355		23	Baseline Baseline	Tinker BDL
36.5 36.5	11:29	22:20	33:50	56 56	710 710		48	Baseline Baseline	Travis R-BDL
10.9 10.9	4:18	10:09	14:27	0 0	303 303		41	Baseline Baseline	Tyndall BDL
21.8 21.8	6:23	14:59	21:23	8 8	449 449		201	Baseline Baseline	USAF Academy R-BDL
3.2 3.2	0:52	1:01	1:54	27 27	40 40		13	Baseline Baseline	Vance BDL
4.5 4.5	2:38	3:06	5:45	0 0	121 121		29	Baseline Baseline	Vandenburg BDL
10.9 10.9	1:56	3:00	4:57	125 125	104 104		11	Baseline Baseline	Whiteman BDL
32.6 32.6	6:44	14:22	21:06	242 242	443 443		35	Baseline Baseline	Wright Patterson R-BDL
1207	Baseline Annual: Capacity (Hours) Lost			100003	11384	0	0	← Total to ADL	
1207	Proposed Annual: Capacity (Hours) Lost			100003			2805		
0	Annual Capacity (Hours) Gained			0	Hours of Work-----Hours of Work				
ANNUAL Capacity Gain (Hours) to MHS				0	Performed In BDL Monthly	Performed In Dental Clinic (Monthly)	Sent To ADL (Monthly)		
					Work Distribution				

Scenario 1a: Baseline, Delivery Cycletime Performance

Delivery Cycletime Performance (Workdays)								
Base	Baseline				Proposed			
	Mean	±1SD	±2SD	"Worst Case"	Mean	±1SD	±2SD	"Worst Case"
1 Altus BDL	12	4	6	18.18				
2 Andrews BDL	14	5	7	21.03				
3 Barksdale R-BDL	23	8	11	34.13				
4 Beale BDL	12	4	6	17.72				
5 Bolling R-BDL	13	4	6	18.77				
6 Brooks BDL	6	2	3	8.29				
7 Cannon BDL	13	4	6	19.02				
8 Charleston BDL	17	6	8	25.43				
9 Columbus BDL	11	4	5	16.19				
10 Davis Montham BDL	13	4	6	18.47				
11 Dover BDL	11	4	5	16.13				
12 Dyess BDL	8	3	4	11.24				
13 Edwards BDL	16	5	8	23.40				
14 Eglin R-BDL	12	4	6	18.20				
15 Ellsworth BDL	9	3	4	13.42				
16 Kelly BDL	6	2	3	8.89				
17 Fairchild BDL	12	4	6	18.36				
18 FE Warren BDL	23	8	11	33.90				
19 Goodfellow BDL	6	2	3	9.24				
20 Grand Forks BDL	21	7	10	30.50				
21 Hanscom BDL	14	5	7	20.70				
22 Hill BDL	7	2	3	9.73				
23 Hollowman BDL	4	1	2	6.15				
24 Hurlburt BDL	31	11	15	45.73				
25 Keesler R-BDL	7	2	3	10.30				
26 Kirtland BDL	15	5	7	21.98				
27 Lackland R-BDL	14	5	7	21.21				
28 Langley R-BDL	21	7	10	31.27				
29 Laughlin BDL	16	6	8	24.34				
30 Little Rock BDL	21	7	10	30.90				
31 Los Angles BDL	40	14	19	59.49				
32 Luke BDL	10	4	5	15.24				
33 Malmstrom BDL	5	2	2	7.39				
34 Maxwell BDL	47	16	22	68.78				
35 McChord BDL	15	5	7	22.76				
36 McConnell BDL	14	5	7	21.23				

Scenerio 1a: Baseline, Delivery Cycletime Performance

Delivery Cycletime Performance (Workdays)									
Base		Baseline				Proposed			
		Mean	±1SD	±2SD	"Worst Case"	Mean	±1SD	±2SD	"Worst Case"
37	McDill BDL	13	5	6	19.59				
38	McGuire BDL	7	2	3	10.26				
39	Minot BDL	8	3	4	11.58				
40	Moody BDL	4	1	2	5.49				
41	Mountain Home BDL	16	5	7	23.08				
42	Nellis R-BDL	20	7	10	29.95				
43	Offutt R-BDL	10	4	5	15.25				
44	Patrick BDL	13	4	6	18.52				
45	Peterson ADL	15	5	7	21.85				
46	Peterson BDL	8	3	4	11.74				
47	Pope BDL	6	2	3	8.71				
48	Randolph BDL	25	8	12	36.50				
49	Robbins BDL	15	5	7	22.47				
50	Scott R-BDL	10	3	5	14.52				
51	Seymour Johnson BDL	9	3	4	13.50				
52	Shaw BDL	13	4	6	19.14				
53	Sheppard R-BDL	13	4	6	19.12				
54	Tinker BDL	13	4	6	18.49				
55	Travis R-BDL	19	6	9	27.70				
56	Tyndall BDL	32	11	15	47.77				
57	USAF Academy R-BDL	20	7	10	30.22				
58	Vance BDL	9	3	4	13.66				
59	Vandenburg BDL	35	12	17	51.64				
60	Whiteman BDL	7	2	3	10.42				
61	Wright Patterson R-BDL	12	4	6	17.20				

Systems Perspective- Delivery Cycletime Performance (Work Days)					
		±1SD	±2SD	"Worst Case"	
Baseline	Mean:	14.6	5	7	21.6
	Mode:				#N/A
	Min:				5.5
	Max:				68.8
Proposed	Mean:				
	Mode:				
	Min:				
	Max:				

Scenerio 1b: Baseline, Monthly Capacity Loss

CONUS Facilities- Monthly Capacity Loss (Hours)		
Base	Baseline	Proposed
1 Altus BDL	18	
2 Andrews BDL	127	
3 Barksdale R-BDL	0	
4 Beale BDL	43	
5 Bolling R-BDL	145	
6 Brooks BDL	95	
7 Cannon BDL	55	
8 Charleston BDL	16	
9 Columbus BDL	24	
10 Davis Montham BDL	145	
11 Dover BDL	68	
12 Dyess BDL	82	
13 Edwards BDL	30	
14 Eglin R-BDL	219	
15 Ellsworth BDL	62	
16 Kelly BDL	54	
17 Fairchild BDL	63	
18 FE Warren BDL	0	
19 Goodfellow BDL	36	
20 Grand Forks BDL	1	
21 Hanscom BDL	30	
22 Hill BDL	175	
23 Hollowman BDL	142	
24 Hurlburt BDL	0	
25 Keesler R-BDL	539	
26 Kirtland BDL	45	
28 Langley R-BDL	0	
29 Laughlin BDL	10	
30 Little Rock BDL	0	
31 Los Angles BDL	0	
32 Luke BDL	133	
33 Malmstrom BDL	150	
34 Maxwell BDL	0	
35 McChord BDL	31	
36 McConnell BDL	32	

Scenerio 1b: Baseline, Monthly Capacity Loss

37	McDill BDL	78
38	McGuire BDL	219
39	Minot BDL	179
40	Moody BDL	147
41	Mountain Home BDL	23
42	Nellis R-BDL	11
43	Offutt R-BDL	243
44	Patrick BDL	55
46	Peterson BDL	144
47	Pope BDL	178
48	Randolph BDL	0
49	Robbins BDL	62
50	Scott R-BDL	253
51	Seymour Johnson BDL	219
52	Shaw BDL	95
53	Sheppard R-BDL	201
54	Tinker BDL	169
55	Travis R-BDL	56
56	Tyndall BDL	0
57	USAF Academy R-BDL	8
58	Vance BDL	27
59	Vandenburg BDL	0
60	Whiteman BDL	125
61	Wright Patterson R-BDL	242
27	Lackland R-BDL	778
45	Peterson ADL	2249

Annual Capacity Loss (Hours) - A Systems Perspective, Less Peterson ADL, and Lackland R-BDL		
Baseline:	Mean:	63682
	MAX:	6469
	MIN:	0
Proposed:	Mean:	
	MAX:	
	MIN:	

Scenerio 1c: Baseline, Federal Labor Cost per Product Hour

CONUS Facilities- Federal Labor Cost Per Product Hour			
	Base	Baseline	Proposed
1	Altus BDL	\$71.47	
2	Andrews BDL	\$70.04	
3	Barksdale R-BDL	\$57.30	
4	Beale BDL	\$77.36	
5	Bolling R-BDL	\$72.65	
6	Brooks BDL	\$125.73	
7	Cannon BDL	\$73.05	
8	Charleston BDL	\$62.70	
9	Columbus BDL	\$81.73	
10	Davis Montham BDL	\$77.42	
11	Dover BDL	\$81.00	
12	Dyess BDL	\$106.34	
13	Edwards BDL	\$171.36	
14	Eglin R-BDL	\$80.70	
15	Ellsworth BDL	\$84.49	
16	Kelly BDL	\$113.77	
17	Fairchild BDL	\$79.01	
18	FE Warren BDL	\$55.04	
19	Goodfellow BDL	\$114.50	
20	Grand Forks BDL	\$52.29	
21	Hanscom BDL	\$67.62	
22	Hill BDL	\$130.43	
23	Hollowman BDL	\$183.47	
24	Hurlburt BDL	\$51.72	
25	Keesler R-BDL	\$128.00	
26	Kirtland BDL	\$64.81	
27	Lackland R-BDL	\$71.59	
28	Langley R-BDL	\$54.13	
29	Laughlin BDL	\$61.87	
30	Little Rock BDL	\$52.11	
31	Los Angles BDL	\$51.72	
32	Luke BDL	\$88.69	
33	Malmstrom BDL	\$152.65	
34	Maxwell BDL	\$51.72	
35	McChord BDL	\$64.13	
36	McConnell BDL	\$64.88	

Scenerio 1c: Baseline, Federal Labor Cost per Product Hour

37	McDill BDL	\$68.68
38	McGuire BDL	\$109.66
39	Minot BDL	\$116.46
40	Moody BDL	\$200.10
41	Mountain Home BDL	\$66.61
42	Nellis R-BDL	\$54.40
43	Offutt R-BDL	\$86.59
44	Patrick BDL	\$72.98
45	Peterson ADL	\$94.77
46	Peterson BDL	\$115.52
47	Pope BDL	\$133.95
48	Randolph BDL	\$51.89
49	Robbins BDL	\$67.47
50	Scott R-BDL	\$86.36
51	Seymour Johnson BDL	\$96.63
52	Shaw BDL	\$73.84
53	Sheppard R-BDL	\$77.01
54	Tinker BDL	\$78.91
55	Travis R-BDL	\$57.94
56	Tyndall BDL	\$52.11
57	USAF Academy R-BDL	\$53.86
58	Vance BDL	\$88.22
59	Vandenburg BDL	\$51.72
60	Whiteman BDL	\$114.56
61	Wright Patterson R-BDL	\$81.42

Monthly, Federal Labor Cost per Product Hour - A Systems Perspective		
Baseline:	Mean:	\$85.23
	MAX:	\$200.10
	MIN:	\$51.72
Proposed:	Mean:	
	MAX:	
	MIN:	

Scenerio 2: Balanced Force Structure-Centralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.													
Withdraw Staffing	Reduce Staffing	Increase Staffing	No Change	Change Skill Level Mix	4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
					E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Altus BDL	Baseline		1		1	80%	\$4,400	\$71.47	49	12.3	4.2	5.9			
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9			
Support Provided by Peterson ADL															
Andrews BDL	Baseline	5		1	6	80%	\$33,576	\$70.04	383	14.2	4.9	6.8			
	Proposed	3	3	1	7	80%	\$34,611	\$72.20		13.8	4.7	6.6			
Barksdale R-BDL	Baseline		2	3	5	80%	\$18,290	\$57.30	273	23.1	7.9	11.0			
	Proposed	2	2	1	5	80%	\$24,128	\$70.81		14.2	4.8	6.8			
Beale BDL	Baseline		2		2	80%	\$8,800	\$77.36	91	12.0	4.1	5.7			
	Baseline		2		2	80%	\$8,800	\$77.36		12.0	4.1	5.7			
Bolling R-BDL	Baseline	1	6	1	8	80%	\$35,645	\$72.65	393	12.7	4.3	6.1			
	Proposed	3	4	1	8	80%	\$39,010	\$79.51		11.1	3.8	5.3			
Brooks BDL	Baseline	1	1		2	80%	\$10,482	\$125.73	67	5.6	1.9	2.7			
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9			
Support Provided by Peterson ADL															
Cannon BDL	Baseline	2			2	80%	\$12,165	\$73.05	133	12.9	4.4	6.1			
	Proposed	1	1		2	80%	\$10,482	\$62.94		15.9	5.4	7.6			
Charleston BDL	Baseline	1		1	2	80%	\$9,246	\$62.70	118	17.2	5.9	8.2			
	Proposed	1	1		2	80%	\$10,482	\$71.08		13.3	4.5	6.3			
Columbus BDL	Baseline		1		1	80%	\$4,400	\$81.73	43	11.0	3.7	5.2			
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9			
Support Provided by Peterson ADL															
Davis Montham BDL	Baseline	3	2	1	6	80%	\$30,211	\$77.42	312	12.5	4.3	6.0			
	Proposed	2	3	1	6	80%	\$28,528	\$73.11		13.5	4.6	6.4			

Scenerio 2: Balanced Force Structure-Centralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
3.2	1:08	1:12	2:20	18	49	24	29	Baseline	Altus BDL
				0			25	Proposed	
24.3	5:30	12:46	18:16	127	383		48	Baseline	Andrews BDL
25.0				141			383	Proposed	
12.2	4:00	8:59	12:59	0	273		16	Baseline	Barksdale R-BDL
17.3				90			273	Proposed	
6.4	1:34	2:45	4:20	43	91		30	Baseline	Beale BDL
6.4				43			91	Baseline	
25.6	8:06	10:35	18:42	145	393		64	Baseline	Bolling R-BDL
28.2				199			393	Proposed	
7.7	1:32	1:38	3:10	95	67	32	0	Baseline	Brooks BDL
				0			34	Proposed	
9.0	2:11	4:09	6:20	55	133		39	Baseline	Cannon BDL
7.7				28			133	Proposed	
6.4	2:03	3:33	5:37	16	118		18	Baseline	Charleston BDL
7.7				43			118	Proposed	
3.2	0:47	1:15	2:03	24	43	17	13	Baseline	Columbus BDL
				0			26	Proposed	
21.8	4:43	10:09	14:52	145	312		44	Baseline	Davis Montham BDL
20.5				118			312	Proposed	

Scenerio 2: Balanced Force Structure-Centralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Dover BDL	Baseline	2			2	80%	\$12,165	\$81.00	120	10.9	3.7	5.2
	Proposed	1	1		2	80%	\$10,482	\$69.79		13.5	4.6	6.4
Dyess BDL	Baseline	1	1		2	80%	\$10,482	\$106.34	79	7.6	2.6	3.6
	Proposed	1			1	80%	\$6,082	\$61.70		15.9	5.4	7.6
Edwards BDL	Baseline	1	1	1	3	80%	\$13,646	\$63.70	171	15.8	5.4	7.6
	Proposed	1	2		3	80%	\$14,882	\$69.48		13.0	4.4	6.2
Eglin R-BDL	Baseline	5	1	3	9	80%	\$44,302	\$80.70	439	12.3	4.2	5.9
	Proposed	4	2	3	9	80%	\$42,620	\$77.63		13.0	4.4	6.2
Ellsworth BDL	Baseline	1	1		2	80%	\$10,482	\$84.49	99	9.1	3.1	4.3
	Proposed	1		1	2	80%	\$9,246	\$74.52		12.0	4.1	5.7
Kelly BDL	Baseline		1	1	2	80%	\$7,563	\$113.77	53	6.0	2.1	2.9
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9
Support Provided by Peterson ADL												
Fairchild BDL	Baseline	1	1	1	3	80%	\$13,646	\$79.01	138	12.4	4.2	5.9
	Baseline	1	1	1	3	80%	\$13,646	\$79.01		12.4	4.2	5.9
FE Warren BDL	Baseline	1		1	2	80%	\$9,246	\$55.04	143	23.0	7.8	10.9
	Proposed	1	1	1	3	80%	\$13,646	\$76.41		13.2	4.5	6.3
Goodfellow BDL	Baseline		1		1	80%	\$4,400	\$114.50	31	6.3	2.1	3.0
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9

Scenerio 2: Balanced Force Structure-Centralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	Proposed	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL			
9.0	2:12	3:30	5:43	68	120		71	Baseline	Dover BDL	
7.7				41	120					
7.7	1:31	2:14	3:45	82	79		17	Baseline	Dyess BDL	
4.5				15	79					
9.6	3:43	4:26	8:10	30	171		26	Baseline	Edwards BDL	
10.9				57	171					
31.4	6:05	14:50	20:55	219	439		20	Baseline	Eglin R-BDL	
30.1				192	439					
7.7	2:28	2:15	4:43	62	99		64	Baseline	Ellsworth BDL	
6.4				35	99					
5.1	1:29	1:02	2:32	54	53		0	Baseline	Kelly BDL	
				0	0	31	22			
9.6	2:11	4:23	6:35	63	138		10	Baseline	Fairchild BDL	
9.6				63	138					
6.4	2:04	4:44	6:48	0	143		27	Baseline	FE Warren BDL	
9.6				59	143					
3.2	0:43	0:44	1:27	36	31		6	Baseline	Goodfellow BDL	
				0	0	15	15			

Scenerio 2: Balanced Force Structure-Centralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Withdraw Staffing	Reduce Staffing											
Increase Staffing	No Change											
Change Skill Level Mix												
Support Provided by Peterson ADL												
Grand Forks BDL	Baseline	1			1	80%	\$6,082	\$52.29	93	20.7	7.0	9.9
	Baseline	1			1	80%	\$6,082	\$52.29	93	20.7	7.0	9.9
Hanscom BDL	Baseline		2		2	80%	\$8,800	\$67.62	104	14.0	4.8	6.7
	Baseline		2		2	80%	\$8,800	\$67.62	104	14.0	4.8	6.7
Hill BDL	Baseline	2	1	1	4	80%	\$19,728	\$130.43	121	6.6	2.2	3.1
	Proposed	1	1		2	80%	\$10,482	\$69.30	121	14.0	4.8	6.7
Hollowman BDL	Baseline	1	1	1	3	80%	\$13,646	\$183.47	60	4.2	1.4	2.0
	Proposed				0	80%	\$0	\$0.00	60	14.5	4.9	6.9
Support Provided by Peterson ADL												
Hurlburt BDL	Baseline	2			2	80%	\$12,165	\$51.72	242	31.0	10.6	14.8
	Proposed	2	2		4	80%	\$20,965	\$69.26	242	14.2	4.8	6.8
Keesler R-BDL	Baseline	6	2	6	14	80%	\$64,275	\$128.00	402	7.0	2.4	3.3
	Proposed	5	4	2	11	80%	\$54,339	\$108.21	402	8.2	2.8	3.9
Kirtland BDL	Baseline	1	2		3	80%	\$14,882	\$64.81	184	14.9	5.1	7.1
	Baseline	1	2		3	80%	\$14,882	\$64.81	184	14.9	5.1	7.1
Lackland R-BDL	Baseline	22	8	12	42	80%	\$206,974	\$71.59	2313	14.4	4.9	6.9
	Proposed	26	4	16	46	80%	\$226,358	\$78.29	2313	12.9	4.4	6.2
Langley R-BDL	Baseline	1	4	2	7	80%	\$30,009	\$54.13	446	21.2	7.2	10.1
	Proposed	2	4	3	9	80%	\$39,255	\$70.43	446	14.3	4.9	6.8
Laughlin BDL	Baseline		1		1	80%	\$4,400	\$61.87	57	16.5	5.6	7.9
	Proposed				0	80%	\$0	\$0.00	57	14.5	4.9	6.9

Scenerio 2: Balanced Force Structure-Centralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
4.5	1:30	2:55	4:26	1	93		4	Baseline	Grand Forks BDL
4.5				1	93				
6.4	2:03	2:53	4:57	30	104		24	Baseline	Hanscom BDL
6.4				30	104				
14.1	1:57	3:48	5:46	175	121		2	Baseline	Hill BDL
7.7				40	121				
9.6	1:09	1:40	2:50	142	60		3	Baseline	Hollowman BDL
				0	0	24	35	Proposed	
9.0	3:33	7:59	11:32	0	242		7	Baseline	Hurlburt BDL
15.4				80	242				
44.8	6:22	12:46	19:08	539	402		23	Baseline	Keesler R-BDL
39.0				418	402				
10.9	3:33	5:11	8:45	45	184		4	Baseline	Kirtland BDL
10.9				45	184				
147.2	30:00	80:13	110:13	778	2313		0	Baseline	Lackland R-BDL
160.0				1047	2313				
21.1	7:53	13:21	21:15	0	446		176	Baseline	Langley R-BDL
27.5				132	446				
3.2	0:55	1:47	2:42	10	57		7	Baseline	Laughlin BDL
				0	0	19	38	Proposed	

Scenerio 2: Balanced Force Structure-Centralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
Withdraw Staffing	Reduce Staffing	4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD 68%	±2SD 95%
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total							
Increase Staffing	No Change											
Change Skill Level Mix												
Support Provided by Peterson ADL												
Little Rock BDL	Baseline	1	1		2	80%	\$10,482	\$52.11	161	20.9	7.1	10.0
	Proposed	1	2		3	80%	\$14,882	\$73.99		12.7	4.3	6.1
Los Angles BDL	Baseline	1			1	80%	\$6,082	\$51.72	140	40.3	13.7	19.2
	Proposed	1	1		2	80%	\$10,482	\$59.77		17.2	5.9	8.2
Luke BDL	Baseline	2	2		4	80%	\$20,965	\$88.69	189	10.3	3.5	4.9
	Proposed	1	2	1	4	80%	\$18,046	\$76.34		13.0	4.4	6.2
Malmstrom BDL	Baseline	1	2		3	80%	\$14,882	\$152.65	78	5.0	1.7	2.4
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9
Support Provided by Peterson ADL												
Maxwell BDL	Baseline	2			2	80%	\$12,165	\$51.72	306	46.6	15.9	22.2
	Proposed	2	2	1	5	80%	\$24,128	\$63.05		16.6	5.7	7.9
McChord BDL	Baseline	1	1		2	80%	\$10,482	\$64.13	131	15.4	5.3	7.4
	Baseline	1	1		2	80%	\$10,482	\$64.13		15.4	5.3	7.4
McConnell BDL	Baseline	1	1		2	80%	\$10,482	\$64.88	129	14.4	4.9	6.9
	Baseline	1	1		2	80%	\$10,482	\$64.88		14.4	4.9	6.9
McDill BDL	Baseline	2	2		4	80%	\$20,965	\$68.68	244	13.3	4.5	6.3
	Baseline	2	2		4	80%	\$20,965	\$68.68		13.3	4.5	6.3
McGuire BDL	Baseline	3	2		5	80%	\$27,047	\$109.66	197	6.9	2.4	3.3
	Proposed	1	2		3	80%	\$14,882	\$60.34		16.3	5.6	7.8
Minot BDL	Baseline	2	2		4	80%	\$20,965	\$116.46	144	7.8	2.7	3.7
	Proposed	1	2		3	80%	\$14,882	\$82.67		11.7	4.0	5.6

Scenerio 2: Balanced Force Structure-Centralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
7.7	2:44	4:55	7:40	0	161		15	Baseline	Little Rock BDL
10.9				68	161				
4.5	2:05	4:35	6:41	0	140		9	Baseline	Los Angles BDL
7.7				21	140				
15.4	2:52	6:08	9:00	133	189		19	Baseline	Luke BDL
12.8				80	189				
10.9	1:28	2:14	3:43	150	78		31	Baseline	Malmstrom BDL
				0	0	31	47		
9.0	4:22	10:12	14:35	0	306		33	Baseline	Maxwell BDL
17.3				57	306				
7.7	2:13	4:00	6:13	31	131		6	Baseline	McChord BDL
7.7				31	131				
7.7	2:50	3:18	6:09	32	129		18	Baseline	McConnell BDL
7.7				32	129				
15.4	5:14	6:24	11:38	78	244		267	Baseline	McDill BDL
15.4				78	244				
19.8	4:14	5:09	9:24	219	197		13	Baseline	McGuire BDL
10.9				31	197				
15.4	1:47	5:04	6:51	179	144		7	Baseline	Minot BDL
10.9				84	144				

Scenerio 2: Balanced Force Structure-Centralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
Withdraw Staffing	Reduce Staffing	4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Increase Staffing	No Change											
Change Skill Level Mix												
Moody BDL	Baseline	1	1	1	3	80%	\$13,646	\$200.10	55	3.7	1.3	1.8
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9
Support Provided by Peterson ADL												
Mountain Home BDL	Baseline	1		1	2	80%	\$9,246	\$66.61	111	15.6	5.3	7.5
	Baseline	1		1	2	80%	\$9,246	\$66.61		15.6	5.3	7.5
Nellis R-BDL	Baseline	2	3	1	6	80%	\$28,528	\$54.40	420	20.3	6.9	9.7
	Proposed	3	4	2	9	80%	\$42,174	\$80.42		12.2	4.2	5.8
Offutt R-BDL	Baseline	5	2		7	80%	\$39,212	\$86.59	362	10.3	3.5	4.9
	Proposed	4	2	1	7	80%	\$36,293	\$80.14		11.6	4.0	5.5
Patrick BDL	Baseline	2			2	80%	\$12,165	\$72.98	133	12.5	4.3	6.0
	Baseline	2			2	80%	\$12,165	\$72.98		12.5	4.3	6.0
Peterson ADL	Baseline	36	20	8	64	80%	\$332,274	\$94.77	3101	14.8	5.0	7.1
	Proposed	45	16	12	*73	80%	\$382,070	\$98.55		14.5	4.9	6.9
Peterson BDL	Baseline	1	2	1	4	80%	\$18,046	\$115.52	125	8.0	2.7	3.8
	Proposed	1	1		2	80%	\$10,482	\$67.10		14.8	5.1	7.1
Pope BDL	Baseline	2	1	1	4	80%	\$19,728	\$133.95	118	5.9	2.0	2.8
	Proposed	1	1		2	80%	\$10,482	\$71.17		12.9	4.4	6.2
Randolph BDL	Baseline	2	1		3	80%	\$16,565	\$51.89	280	24.7	8.4	11.8
	Proposed	2	2	1	5	80%	\$24,128	\$69.04		13.8	4.7	6.6
Robbins BDL	Baseline	2	1	1	4	80%	\$19,728	\$67.47	234	15.2	5.2	7.3
	Baseline	2	1	1	4	80%	\$19,728	\$67.47		15.2	5.2	7.3
Scott R-BDL	Baseline	5	2	1	8	80%	\$42,375	\$86.36	393	9.8	3.4	4.7
	Proposed	4	3	1	8	80%	\$40,693	\$82.94		10.4	3.6	5.0

*Actual assigned technicians engaged in direct laboratory support. A management/production/administrative support ratio of 1:5 should be added for a total of 88 personnel.

Scenerio 2: Balanced Force Structure-Centralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
9.6	1:05	1:30	2:36	147	55		29	Baseline	Moody BDL
				0	0	23	32	Proposed	
6.4	2:03	3:14	5:17	23	111		20	Baseline	Mountain Home BDL
6.4				23	111			Baseline	
20.5	5:56	14:03	19:59	11	420		44	Baseline	Nellis R-BDL
30.1				212	420			Proposed	
28.8	6:05	11:10	17:15	243	362		10	Baseline	Offutt R-BDL
26.2				189	362			Proposed	
9.0	2:29	3:52	6:21	55	133		31	Baseline	Patrick BDL
9.0				55	133			Baseline	
240.6	20:19	113:20	133:40	2249	2805			Baseline	Peterson ADL
275.8				2691				Proposed	
12.8	1:46	4:10	5:57	144	125		6	Baseline	Peterson BDL
7.7				36	125			Proposed	
14.1	2:18	3:18	5:36	178	118		44	Baseline	Pope BDL
7.7				43	118			Proposed	
12.2	5:44	7:34	13:19	0	280		29	Baseline	Randolph BDL
17.3				83	280			Proposed	
14.1	3:24	7:44	11:08	62	234		9	Baseline	Robbins BDL
14.1				62	234			Baseline	
30.7	8:06	10:35	18:42	253	393		10	Baseline	Scott R-BDL
29.4				226	393			Proposed	

Scenerio 2: Balanced Force Structure-Centralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
	Withdraw Staffing Reduce Staffing Increase Staffing No Change Change Skill Level Mix	4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Seymour Johnson BDL	Baseline	5			5	80%	\$30,412	\$96.63	252	9.1	3.1	4.4
	Proposed	2	2		4	80%	\$20,965	\$66.61		14.8	5.0	7.1
Shaw BDL	Baseline	2	2		4	80%	\$20,965	\$73.84	227	13.0	4.4	6.2
	Baseline	2	2		4	80%	\$20,965	\$73.84		13.0	4.4	6.2
Sheppard R-BDL	Baseline	3	4	3	10	80%	\$45,337	\$77.01	471	12.9	4.4	6.2
	Baseline	3	4	3	10	80%	\$45,337	\$77.01		12.9	4.4	6.2
Tinker BDL	Baseline	4	1	2	7	80%	\$35,057	\$78.91	355	12.5	4.3	6.0
	Proposed	3	2	1	6	80%	\$30,211	\$68.00		14.9	5.1	7.1
Travis R-BDL	Baseline	4	4	3	11	80%	\$51,420	\$57.94	710	18.8	6.4	8.9
	Proposed	6	4	3	13	80%	\$63,585	\$71.64		13.8	4.7	6.6
Tyndall BDL	Baseline	1	2		3	80%	\$14,882	\$52.11	303	32.3	11.0	15.4
	Proposed	2	3		5	80%	\$25,365	\$66.91		14.9	5.1	7.1
USAF Academy R-BDL	Baseline	3	2	1	6	80%	\$30,211	\$53.86	449	20.5	7.0	9.8
	Proposed	4	2	1	7	80%	\$36,293	\$64.71		15.8	5.4	7.6
Vance BDL	Baseline		1		1	80%	\$4,400	\$88.22	40	9.2	3.2	4.4
	Proposed				0	80%	\$0	\$0.00		14.5	4.9	6.9
Support Provided by Peterson ADL												
Vandenburg BDL	Baseline	1			1	80%	\$6,082	\$51.72	121	35.0	11.9	16.7
	Proposed	1	1		2	80%	\$10,482	\$69.46		13.0	4.4	6.2
Whiteman BDL	Baseline	1	2		3	80%	\$14,882	\$114.56	104	7.1	2.4	3.4
	Proposed	1	1		2	80%	\$10,482	\$80.69		11.0	3.7	5.2
Wright Patterson R-BDL	Baseline	4	4	1	9	80%	\$45,093	\$81.42	443	11.6	4.0	5.6
	Proposed	4	3	1	8	80%	\$40,693	\$73.47		13.3	4.5	6.3
Manning	Baseline	164	111	61	336		Annualized Federal Labor Costs	Annual Federal Labor Cost for Goods and Services Provided	Baseline: Daily Capacity (Hours)			
	Proposed	164	111	61	336				Proposed	Proposed: Daily Capacity (Hours)		
	Balance	0	0	0	0				Savings / (Loss)			
		Annual Federal Labor Cost					\$20,146,573	\$16,687,273	Baseline			
		Proposed Annual Federal Labor Cost					\$20,146,573	\$16,117,259	Proposed			
		Annual Federal Labor Cost Savings					\$0	\$570,014	Savings / (Loss)			

Scenerio 2: Balanced Force Structure-Centralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
22.4	3:57	8:01	11:59	219	252		3	Baseline	Seymour Johnson
15.4				71	252				Proposed
15.4	3:29	7:19	10:49	95	227		106	Baseline	Shaw BDL
15.4				95	227				Baseline
32.0	7:02	15:24	22:26	201	471		31	Baseline	Sheppard R-BDL
32.0				201	471				Baseline
25.0	5:03	11:52	16:56	169	355		23	Baseline	Tinker BDL
21.8				102	355				Proposed
36.5	11:29	22:20	33:50	56	710		48	Baseline	Travis R-BDL
45.4				244	710				Proposed
10.9	4:18	10:09	14:27	0	303		41	Baseline	Tyndall BDL
18.6				86	303				Proposed
21.8	6:23	14:59	21:23	8	449		201	Baseline	USAF Academy R-BDL
26.2				102	449				Proposed
3.2	0:52	1:01	1:54	27	40		13	Baseline	Vance BDL
				0		18	21		Proposed
4.5	2:38	3:06	5:45	0	121		29	Baseline	Vandenburg BDL
7.7				41	121				Proposed
10.9	1:56	3:00	4:57	125	104		11	Baseline	Whiteman BDL
7.7				57	104				Proposed
32.6	6:44	14:22	21:06	242	443		35	Baseline	Wright Patterson R-BDL
29.4				175	443				Proposed
1207	Baseline Annual: Capacity (Hours) Lost			100003	10852	235	296		
1207	Proposed Annual: Capacity (Hours) Lost			98363			3101	←	Total to ADL
0	Annual Capacity (Hours) Gained			1640	Hours of Work-----Hours of Work				
	ANNUAL Capacity Gain (Loss) to MHS				Performed In BDL Monthly	Performed In Dental Clinic (Monthly)	Sent To ADL (Monthly)		
	1640								
					Work Distribution				

Scenario 2a: Centralized, Delivery Cycletime Performance

Delivery Cycletime Performance (Workdays)								
Base	Baseline				Proposed			
	Mean	±1SD	±2SD	"Worst Case"	Mean	±1SD	±2SD	"Worst Case"
1 Altus BDL	12	4	6	18.18	14	5	7	21.37
2 Andrews BDL	14	5	7	21.03	14	5	7	20.34
3 Barksdale R-BDL	23	8	11	34.13	14	5	7	20.98
4 Beale BDL	12	4	6	17.72	12	4	6	17.72
5 Bolling R-BDL	13	4	6	18.77	11	4	5	16.37
6 Brooks BDL	6	2	3	8.29	14	5	7	21.37
7 Cannon BDL	13	4	6	19.02	16	5	8	23.46
8 Charleston BDL	17	6	8	25.43	13	5	6	19.64
9 Columbus BDL	11	4	5	16.19	14	5	7	21.37
10 Davis Montham BDL	13	4	6	18.47	14	5	6	19.97
11 Dover BDL	11	4	5	16.13	13	5	6	19.90
12 Dyess BDL	8	3	4	11.24	16	5	8	23.41
13 Edwards BDL	16	5	8	23.40	13	4	6	19.22
14 Eglin R-BDL	12	4	6	18.20	13	4	6	19.17
15 Ellsworth BDL	9	3	4	13.42	12	4	6	17.79
16 Kelly BDL	6	2	3	8.89	14	5	7	21.37
17 Fairchild BDL	12	4	6	18.36	12	4	6	18.36
18 FE Warren BDL	23	8	11	33.90	13	5	6	19.50
19 Goodfellow BDL	6	2	3	9.24	14	5	7	21.37
20 Grand Forks BDL	21	7	10	30.50	21	7	10	30.50
21 Hanscom BDL	14	5	7	20.70	14	5	7	20.70
22 Hill BDL	7	2	3	9.73	14	5	7	20.61
23 Hollowman BDL	4	1	2	6.15	14	5	7	21.37
24 Hurlburt BDL	31	11	15	45.73	14	5	7	20.96
25 Keesler R-BDL	7	2	3	10.30	8	3	4	12.12
26 Kirtland BDL	15	5	7	21.98	15	5	7	21.98
27 Lackland R-BDL	14	5	7	21.21	13	4	6	19.12
28 Langley R-BDL	21	7	10	31.27	14	5	7	21.09
29 Laughlin BDL	16	6	8	24.34	14	5	7	21.37
30 Little Rock BDL	21	7	10	30.90	13	4	6	18.76
31 Los Angles BDL	40	14	19	59.49	17	6	8	25.47
32 Luke BDL	10	4	5	15.24	13	4	6	19.17
33 Malmstrom BDL	5	2	2	7.39	14	5	7	21.37
34 Maxwell BDL	47	16	22	68.78	17	6	8	24.53
35 McChord BDL	15	5	7	22.76	15	5	7	22.76
36 McConnell BDL	14	5	7	21.23	14	5	7	21.23

Scenario 2a: Centralized, Delivery Cycletime Performance

Delivery Cycletime Performance (Workdays)									
Base		Baseline				Proposed			
		Mean	±1SD	±2SD	"Worst Case"	Mean	±1SD	±2SD	"Worst Case"
37	McDill BDL	13	5	6	19.59	13	5	6	19.59
38	McGuire BDL	7	2	3	10.26	16	6	8	24.08
39	Minot BDL	8	3	4	11.58	12	4	6	17.29
40	Moody BDL	4	1	2	5.49	14	5	7	21.37
41	Mountain Home BDL	16	5	7	23.08	16	5	7	23.08
42	Nellis R-BDL	20	7	10	29.95	12	4	6	18.04
43	Offutt R-BDL	10	4	5	15.25	12	4	6	17.18
44	Patrick BDL	13	4	6	18.52	13	4	6	18.52
45	Peterson ADL	15	5	7	21.85	14	5	7	21.37
46	Peterson BDL	8	3	4	11.74	15	5	7	21.93
47	Pope BDL	6	2	3	8.71	13	4	6	19.08
48	Randolph BDL	25	8	12	36.50	14	5	7	20.35
49	Robbins BDL	15	5	7	22.47	15	5	7	22.47
50	Scott R-BDL	10	3	5	14.52	10	4	5	15.39
51	Seymour Johnson BDL	9	3	4	13.50	15	5	7	21.84
52	Shaw BDL	13	4	6	19.14	13	4	6	19.14
53	Sheppard R-BDL	13	4	6	19.12	13	4	6	19.12
54	Tinker BDL	13	4	6	18.49	15	5	7	22.04
55	Travis R-BDL	19	6	9	27.70	14	5	7	20.39
56	Tyndall BDL	32	11	15	47.77	15	5	7	22.06
57	USAF Academy R-BDL	20	7	10	30.22	16	5	7	22.97
58	Vance BDL	9	3	4	13.66	14	5	7	21.37
59	Vandenburg BDL	35	12	17	51.64	13	4	6	19.13
60	Whiteman BDL	7	2	3	10.42	11	4	5	16.24
61	Wright Patterson R-BDL	12	4	6	17.20	13	5	6	19.62

Systems Perspective- Delivery Cycletime Performance (Work Days)					
		±1SD	±2SD	"Worst Case"	
Baseline	Mean:	14.6	5	7	21.6
	Mode:				#N/A
	Min:				5.5
	Max:				68.8
Proposed	Mean:	13.9	5	7	20.5
	Mode:				21.4
	Min:				12.1
	Max:				30.5

Scenerio 2b: Centralized, Monthly Capacity Loss

CONUS Facilities- Monthly Capacity Loss (Hours)			
	Base	Baseline	Proposed
1	Altus BDL	18	0
2	Andrews BDL	127	141
3	Barksdale R-BDL	0	90
4	Beale BDL	43	43
5	Bolling R-BDL	145	199
6	Brooks BDL	95	0
7	Cannon BDL	55	28
8	Charleston BDL	16	43
9	Columbus BDL	24	0
10	Davis Montham BDL	145	118
11	Dover BDL	68	41
12	Dyess BDL	82	15
13	Edwards BDL	30	57
14	Eglin R-BDL	219	192
15	Ellsworth BDL	62	35
16	Kelly BDL	54	0
17	Fairchild BDL	63	63
18	FE Warren BDL	0	59
19	Goodfellow BDL	36	0
20	Grand Forks BDL	1	1
21	Hanscom BDL	30	30
22	Hill BDL	175	40
23	Hollowman BDL	142	0
24	Hurlburt BDL	0	80
25	Keesler R-BDL	539	418
26	Kirtland BDL	45	45
28	Langley R-BDL	0	132
29	Laughlin BDL	10	0
30	Little Rock BDL	0	68
31	Los Angles BDL	0	21
32	Luke BDL	133	80
33	Malmstrom BDL	150	0
34	Maxwell BDL	0	57
35	McChord BDL	31	31
36	McConnell BDL	32	32

Scenerio 2b: Centralized, Monthly Capacity Loss

37	McDill BDL	78	78
38	McGuire BDL	219	31
39	Minot BDL	179	84
40	Moody BDL	147	0
41	Mountain Home BDL	23	23
42	Nellis R-BDL	11	212
43	Offutt R-BDL	243	189
44	Patrick BDL	55	55
46	Peterson BDL	144	36
47	Pope BDL	178	43
48	Randolph BDL	0	83
49	Robbins BDL	62	62
50	Scott R-BDL	253	226
51	Seymour Johnson BDL	219	71
52	Shaw BDL	95	95
53	Sheppard R-BDL	201	201
54	Tinker BDL	169	102
55	Travis R-BDL	56	244
56	Tyndall BDL	0	86
57	USAF Academy R-BDL	8	86
58	Vance BDL	27	0
59	Vandenburg BDL	0	41
60	Whiteman BDL	125	57
61	Wright Patterson R-BDL	242	175
27	Lackland R-BDL	778	1047
45	Peterson ADL	2249	2691

Annual Capacity Loss (Hours) - A Systems Perspective, Less Peterson ADL, and Lackland R-BDL		
Baseline:	Mean:	63682
	MAX:	6469
	MIN:	0
Proposed:	Mean:	53313
	MAX:	5017
	MIN:	0

Scenario 2c: Centralized, Federal Labor Cost per Product Hour

CONUS Facilities- Federal Labor Cost Per Product Hour			
	Base	Baseline	Proposed
1	Altus BDL	\$71.47	\$0.00
2	Andrews BDL	\$70.04	\$72.20
3	Barksdale R-BDL	\$57.30	\$70.81
4	Beale BDL	\$77.36	\$77.36
5	Bolling R-BDL	\$72.65	\$79.51
6	Brooks BDL	\$125.73	\$0.00
7	Cannon BDL	\$73.05	\$62.94
8	Charleston BDL	\$62.70	\$71.08
9	Columbus BDL	\$81.73	\$0.00
10	Davis Montham BDL	\$77.42	\$73.11
11	Dover BDL	\$81.00	\$69.79
12	Dyess BDL	\$106.34	\$61.70
13	Edwards BDL	\$171.36	\$171.36
14	Eglin R-BDL	\$80.70	\$77.63
15	Ellsworth BDL	\$84.49	\$74.52
16	Kelly BDL	\$113.77	\$0.00
17	Fairchild BDL	\$79.01	\$79.01
18	FE Warren BDL	\$55.04	\$76.41
19	Goodfellow BDL	\$114.50	\$0.00
20	Grand Forks BDL	\$52.29	\$52.29
21	Hanscom BDL	\$67.62	\$67.62
22	Hill BDL	\$130.43	\$69.30
23	Hollowman BDL	\$183.47	\$0.00
24	Hurlburt BDL	\$51.72	\$69.26
25	Keesler R-BDL	\$128.00	\$108.21
26	Kirtland BDL	\$64.81	\$64.81
27	Lackland R-BDL	\$71.59	\$78.29
28	Langley R-BDL	\$54.13	\$70.43
29	Laughlin BDL	\$61.87	\$0.00
30	Little Rock BDL	\$52.11	\$73.99
31	Los Angeles BDL	\$51.72	\$59.77
32	Luke BDL	\$88.69	\$76.34
33	Malmstrom BDL	\$152.65	\$0.00
34	Maxwell BDL	\$51.72	\$63.05
35	McChord BDL	\$64.13	\$64.13
36	McConnell BDL	\$64.88	\$64.88

Scenario 2c: Centralized, Federal Labor Cost per Product Hour

37	McDill BDL	\$68.68	\$68.68
38	McGuire BDL	\$109.66	\$60.34
39	Minot BDL	\$116.46	\$82.67
40	Moody BDL	\$200.10	\$0.00
41	Mountain Home BDL	\$66.61	\$66.61
42	Nellis R-BDL	\$54.40	\$80.42
43	Offutt R-BDL	\$86.59	\$80.14
44	Patrick BDL	\$72.98	\$72.98
45	Peterson ADL	\$94.77	\$98.55
46	Peterson BDL	\$115.52	\$67.10
47	Pope BDL	\$133.95	\$71.17
48	Randolph BDL	\$51.89	\$69.04
49	Robbins BDL	\$67.47	\$67.47
50	Scott R-BDL	\$86.36	\$82.94
51	Seymour Johnson BDL	\$96.63	\$66.61
52	Shaw BDL	\$73.84	\$73.84
53	Sheppard R-BDL	\$77.01	\$77.01
54	Tinker BDL	\$78.91	\$68.00
55	Travis R-BDL	\$57.94	\$71.64
56	Tyndall BDL	\$52.11	\$66.91
57	USAF Academy R-BDL	\$53.86	\$64.71
58	Vance BDL	\$88.22	\$0.00
59	Vandenburg BDL	\$51.72	\$69.46
60	Whiteman BDL	\$114.56	\$80.69
61	Wright Patterson R-BDL	\$81.42	\$73.47

Monthly, Federal Labor Cost per Product Hour - A Systems Perspective		
Baseline:	Mean:	\$85.23
	MAX:	\$200.10
	MIN:	\$51.72
Proposed:	Mean:	\$61.97
	MAX:	\$171.36
	MIN:	\$0.00

Scenerio 3: Balanced Force Structure-Decentralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Altus BDL	Baseline		1		1	80%	\$4,400	\$71.47	79	12.3	4.2	5.9
	Proposed		2		2	80%	\$8,800	\$89.39		10.4	3.6	5.0
Andrews BDL	Baseline	5		1	6	80%	\$33,576	\$70.04	431	14.2	4.9	6.8
	Proposed	6	1	1	8	80%	\$44,058	\$81.76		11.9	4.1	5.7
Barksdale R-BDL	Baseline		2	3	5	80%	\$18,290	\$57.30	288	23.1	7.9	11.0
	Proposed	3	2	2	7	80%	\$33,374	\$92.66		10.4	3.5	4.9
Beale BDL	Baseline		2		2	80%	\$8,800	\$77.36	121	12.0	4.1	5.7
	Proposed	2	1		3	80%	\$16,565	\$109.87		8.3	2.8	3.9
Bolling R-BDL	Baseline	1	6	1	8	80%	\$35,645	\$72.65	456	12.7	4.3	6.1
	Proposed	3	4	2	9	80%	\$42,174	\$73.98		13.0	4.4	6.2
Brooks BDL	Baseline	1	1		2	80%	\$10,482	\$125.73	67	5.6	1.9	2.7
	Proposed	1			1	80%	\$6,082	\$72.96		11.7	4.0	5.6
Cannon BDL	Baseline	2			2	80%	\$12,165	\$73.05	172	12.9	4.4	6.1
	Proposed	2	1		3	80%	\$16,565	\$77.04		12.6	4.3	6.0
Charleston BDL	Baseline	1		1	2	80%	\$9,246	\$62.70	136	17.2	5.9	8.2
	Proposed	1	1		2	80%	\$10,482	\$61.64		16.5	5.6	7.9
Columbus BDL	Baseline		1		1	80%	\$4,400	\$81.73	56	11.0	3.7	5.2
	Baseline		1		1	80%	\$4,400	\$63.00		16.3	5.6	7.8
Davis Montham BDL	Baseline	3	2	1	6	80%	\$30,211	\$77.42	356	12.5	4.3	6.0
	Proposed	4	2	1	7	80%	\$36,293	\$81.54		11.9	4.1	5.7

Scenerio 3: Balanced Force Structure-Decentralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
3.2	1:08	1:12	2:20	18	49		29	Baseline	Altus BDL
6.4				56	79			Proposed	
24.3	5:30	12:46	18:16	127	383		48	Baseline	Andrews BDL
32.0				241	431			Proposed	
12.2	4:00	8:59	12:59	0	273		16	Baseline	Barksdale R-BDL
23.7				209	288			Proposed	
6.4	1:34	2:45	4:20	43	91		30	Baseline	Beale BDL
12.2				135	121			Proposed	
25.6	8:06	10:35	18:42	145	393		64	Baseline	Bolling R-BDL
30.1				176	456			Proposed	
7.7	1:32	1:38	3:10	95	67		0	Baseline	Brooks BDL
4.5				27	67			Proposed	
9.0	2:11	4:09	6:20	55	133		39	Baseline	Cannon BDL
12.2				83	172			Proposed	
6.4	2:03	3:33	5:37	16	118		18	Baseline	Charleston BDL
7.7				25	136			Proposed	
3.2	0:47	1:15	2:03	24	43		13	Baseline	Columbus BDL
3.2				11	56			Baseline	
21.8	4:43	10:09	14:52	145	312		44	Baseline	Davis Montham BDL
26.2				195	356			Proposed	

Scenario 3: Balanced Force Structure-Decentralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.													
Withdraw Staffing	Reduce Staffing	Increase Staffing	No Change	Change in Skill Level	4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
					E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Dover BDL	Baseline	2			2	80%	\$12,165	\$81.00	191	10.9	3.7	5.2			
	Proposed	3	1		4	80%	\$22,647	\$94.65	191	10.0	3.4	4.8			
Dyess BDL	Baseline	1	1		2	80%	\$10,482	\$106.34	96	7.6	2.6	3.6			
	Baseline	1	1		2	80%	\$10,482	\$87.14	96	10.4	3.6	5.0			
Edwards BDL	Baseline	1	1	1	3	80%	\$13,646	\$63.70	198	15.8	5.4	7.6			
	Proposed	2	1	1	4	80%	\$19,728	\$79.90	198	11.5	3.9	5.5			
Eglin R-BDL	Baseline	5	1	3	9	80%	\$44,302	\$80.70	459	12.3	4.2	5.9			
	Proposed	4	2	3	9	80%	\$42,620	\$74.21	459	13.8	4.7	6.6			
Ellsworth BDL	Baseline	1	1		2	80%	\$10,482	\$84.49	163	9.1	3.1	4.3			
	Proposed	2	1		3	80%	\$16,565	\$81.18	163	11.5	3.9	5.5			
Kelly BDL	Baseline		1	1	2	80%	\$7,563	\$113.77	53	6.0	2.1	2.9			
	Proposed		1		1	80%	\$4,400	\$66.19	53	12.8	4.4	6.1			
Fairchild BDL	Baseline	1	1	1	3	80%	\$13,646	\$79.01	149	12.4	4.2	5.9			
	Baseline	1	1	1	3	80%	\$13,646	\$73.44	149	13.8	4.7	6.6			
FE Warren BDL	Baseline	1		1	2	80%	\$9,246	\$55.04	170	23.0	7.8	10.9			
	Proposed	2	1	1	4	80%	\$19,728	\$93.04	170	10.5	3.6	5.0			
Goodfellow BDL	Baseline		1		1	80%	\$4,400	\$114.50	37	6.3	2.1	3.0			
	Baseline		1		1	80%	\$4,400	\$94.78	37	8.8	3.0	4.2			

Scenerio 3: Balanced Force Structure-Decentralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	Proposed	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL			
9.0	2:12	3:30	5:43	68	120		71	Baseline	Dover BDL	
16.6				158	191					
7.7	1:31	2:14	3:45	82	79		17	Baseline	Dyess BDL	
7.7				65	96					
9.6	3:43	4:26	8:10	30	171		26	Baseline	Edwards BDL	
14.1				98	198					
31.4	6:05	14:50	20:55	219	439		20	Baseline	Eglin R-BDL	
30.1				172	459					
7.7	2:28	2:15	4:43	62	99		64	Baseline	Ellsworth BDL	
12.2				92	163					
5.1	1:29	1:02	2:32	54	53		0	Baseline	Kelly BDL	
3.2				14	53					
9.6	2:11	4:23	6:35	63	138		10	Baseline	Fairchild BDL	
9.6				53	149					
6.4	2:04	4:44	6:48	0	143		27	Baseline	FE Warren BDL	
14.1				126	170					
3.2	0:43	0:44	1:27	36	31		6	Baseline	Goodfellow BDL	
3.2				30	37					

Scenerio 3: Balanced Force Structure-Decentralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Grand Forks BDL	Baseline	1			1	80%	\$6,082	\$52.29	97	20.7	7.0	9.9
	Proposed		2		2	80%	\$8,800	\$72.26		13.4	4.6	6.4
Hanscom BDL	Baseline		2		2	80%	\$8,800	\$67.62	128	14.0	4.8	6.7
	Proposed	2	1		3	80%	\$16,565	\$103.79		8.4	2.8	4.0
Hill BDL	Baseline	2	1	1	4	80%	\$19,728	\$130.43	123	6.6	2.2	3.1
	Proposed	1	1		2	80%	\$10,482	\$68.45		14.2	4.8	6.8
Hollowman BDL	Baseline	1	1	1	3	80%	\$13,646	\$183.47	62	4.2	1.4	2.0
	Proposed	1			1	80%	\$6,082	\$78.12		11.4	3.9	5.4
Hurlburt BDL	Baseline	2			2	80%	\$12,165	\$51.72	249	31.0	10.6	14.8
	Proposed	2	2	1	5	80%	\$24,128	\$77.44		12.7	4.3	6.1
Keesler R-BDL	Baseline	6	2	6	14	80%	\$64,275	\$128.00	425	7.0	2.4	3.3
	Proposed	4	2	3	9	80%	\$42,620	\$80.32		12.3	4.2	5.9
Kirtland BDL	Baseline	1	2		3	80%	\$14,882	\$64.81	188	14.9	5.1	7.1
	Proposed	2	2		4	80%	\$20,965	\$89.24		9.6	3.3	4.6
Lackland R-BDL	Baseline	22	8	12	42	80%	\$206,974	\$71.59	2313	14.4	4.9	6.9
	Proposed	28	8	17	53	80%	\$259,286	\$89.68		11.0	3.7	5.2
Langley R-BDL	Baseline	1	4	2	7	80%	\$30,009	\$54.13	622	21.2	7.2	10.1
	Proposed	5	5	3	13	80%	\$61,902	\$79.61		12.6	4.3	6.0
Laughlin BDL	Baseline		1		1	80%	\$4,400	\$61.87	63	16.5	5.6	7.9
	Proposed	1			1	80%	\$6,082	\$76.72		12.4	4.2	5.9

Scenerio 3: Balanced Force Structure-Decentralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
4.5	1:30	2:55	4:26	1	93		4	Baseline	Grand Forks BDL
6.4				37	97				
6.4	2:03	2:53	4:57	30	104		24	Baseline	Hanscom BDL
12.2				128	128				
14.1	1:57	3:48	5:46	175	121		2	Baseline	Hill BDL
7.7				39	123				
9.6	1:09	1:40	2:50	142	60		3	Baseline	Hollowman BDL
4.5				32	62				
9.0	3:33	7:59	11:32	0	242		7	Baseline	Hurlburt BDL
17.3				114	249				
44.8	6:22	12:46	19:08	539	402		23	Baseline	Keesler R-BDL
30.1				207	425				
10.9	3:33	5:11	8:45	45	184		4	Baseline	Kirtland BDL
15.4				135	188				
147.2	30:00	80:13	110:13	778	2313		0	Baseline	Lackland R-BDL
183.7				1544	2313				
21.1	7:53	13:21	21:15	0	446		176	Baseline	Langley R-BDL
44.2				305	622				
3.2	0:55	1:47	2:42	10	57		7	Baseline	Laughlin BDL
4.5				31	63				

Scenerio 3: Balanced Force Structure-Decentralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.													
Withdraw Staffing	Reduce Staffing	Increase Staffing	No Change	Change in Skill Level	4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
					E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Little Rock BDL	Baseline	1	1		2	80%	\$10,482	\$52.11	175	20.9	7.1	10.0			
	Proposed	2	1		3	80%	\$16,565	\$75.51		12.5	4.3	6.0			
Los Angles BDL	Baseline	1			1	80%	\$6,082	\$51.72	150	40.3	13.7	19.2			
	Proposed	2	1		3	80%	\$16,565	\$88.56		10.5	3.6	5.0			
Luke BDL	Baseline	2	2		4	80%	\$20,965	\$88.69	208	10.3	3.5	4.9			
	Baseline	2	2		4	80%	\$20,965	\$80.73		11.8	4.0	5.6			
Malmstrom BDL	Baseline	1	2		3	80%	\$14,882	\$152.65	109	5.0	1.7	2.4			
	Baseline	1	2		3	80%	\$14,882	\$109.46		8.3	2.8	3.9			
Maxwell BDL	Baseline	2			2	80%	\$12,165	\$51.72	339	46.6	15.9	22.2			
	Proposed	3	2	1	6	80%	\$30,211	\$71.25		14.2	4.9	6.8			
McChord BDL	Baseline	1	1		2	80%	\$10,482	\$64.13	136	15.4	5.3	7.4			
	Proposed	1	2		3	80%	\$14,882	\$87.23		10.4	3.5	5.0			
McConnell BDL	Baseline	1	1		2	80%	\$10,482	\$64.88	147	14.4	4.9	6.9			
	Proposed	1	2		3	80%	\$14,882	\$80.81		10.9	3.7	5.2			
McDill BDL	Baseline	2	2		4	80%	\$20,965	\$68.68	511	13.3	4.5	6.3			
	Proposed	4	4	1	9	80%	\$45,093	\$70.58		14.6	5.0	7.0			
McGuire BDL	Baseline	3	2		5	80%	\$27,047	\$109.66	211	6.9	2.4	3.3			
	Proposed	2	2		4	80%	\$20,965	\$79.61		10.9	3.7	5.2			
Minot BDL	Baseline	2	2		4	80%	\$20,965	\$116.46	151	7.8	2.7	3.7			
	Proposed	1	2		3	80%	\$14,882	\$79.01		12.4	4.2	5.9			

Scenerio 3: Balanced Force Structure-Decentralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)				
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL		
7.7	2:44	4:55	7:40	0	161		15	Baseline	Little Rock BDL
12.2				80	175			Proposed	
4.5	2:05	4:35	6:41	0	140		9	Baseline	Los Angles BDL
12.2				106	150			Proposed	
15.4	2:52	6:08	9:00	133	189		19	Baseline	Luke BDL
15.4				115	208			Baseline	
10.9	1:28	2:14	3:43	150	78		31	Baseline	Malmstrom BDL
10.9				120	109			Baseline	
9.0	4:22	10:12	14:35	0	306		33	Baseline	Maxwell BDL
21.8				118	339			Proposed	
7.7	2:13	4:00	6:13	31	131		6	Baseline	McChord BDL
10.9				92	136			Proposed	
7.7	2:50	3:18	6:09	32	129		18	Baseline	McConnell BDL
10.9				81	147			Proposed	
15.4	5:14	6:24	11:38	78	244		267	Baseline	McDill BDL
32.6				174	511			Proposed	
19.8	4:14	5:09	9:24	219	197		13	Baseline	McGuire BDL
15.4				112	211			Proposed	
15.4	1:47	5:04	6:51	179	144		7	Baseline	Minot BDL
10.9				78	151			Proposed	

Scenario 3: Balanced Force Structure-Decentralized

		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD ±2SD Workdays	
		E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total						68%	95%
Withdraw Staffing	Reduce Staffing											
Increase Staffing	No Change											
Change in Skill Level												
Moody BDL	Baseline	1	1	1	3	80%	\$13,646	\$200.10	83	3.7	1.3	1.8
	Proposed	1	1		2	80%	\$10,482	\$100.80		9.1	3.1	4.4
Mountain Home BDL	Baseline	1		1	2	80%	\$9,246	\$66.61	131	15.6	5.3	7.5
	Proposed	1	1	1	3	80%	\$13,646	\$83.27		11.7	4.0	5.6
Nellis R-BDL	Baseline	2	3	1	6	80%	\$28,528	\$54.40	463	20.3	6.9	9.7
	Proposed	3	4	2	9	80%	\$42,174	\$72.85		14.0	4.8	6.7
Offutt R-BDL	Baseline	5	2		7	80%	\$39,212	\$86.59	372	10.3	3.5	4.9
	Proposed	4	2	2	8	80%	\$39,456	\$84.82		11.1	3.8	5.3
Patrick BDL	Baseline	2			2	80%	\$12,165	\$72.98	164	12.5	4.3	6.0
	Proposed	2	1		3	80%	\$16,565	\$80.63		11.6	4.0	5.5
Peterson ADL	Baseline	36	20	8	64	80%	\$332,274	\$94.77	0	14.8	5.0	7.1
	Proposed				0		\$0	\$0.00		0.0	0.0	0.0
Support to Other Federal / DoD Activities Terminated												
Peterson BDL	Baseline	1	2	1	4	80%	\$18,046	\$115.52	131	8.0	2.7	3.8
	Proposed	1	2		3	80%	\$14,882	\$91.12		10.3	3.5	4.9
Pope BDL	Baseline	2	1	1	4	80%	\$19,728	\$133.95	162	5.9	2.0	2.8
	Proposed	2	1		3	80%	\$16,565	\$81.91		11.5	3.9	5.5
Randolph BDL	Baseline	2	1		3	80%	\$16,565	\$51.89	309	24.7	8.4	11.8
	Proposed	3	2		5	80%	\$27,047	\$70.11		13.3	4.5	6.4
Robbins BDL	Baseline	2	1	1	4	80%	\$19,728	\$67.47	243	15.2	5.2	7.3
	Proposed	3	1	1	5	80%	\$25,811	\$84.99		11.3	3.9	5.4
Scott R-BDL	Baseline	5	2	1	8	80%	\$42,375	\$86.36	403	9.8	3.4	4.7
	Proposed	4	3	2	9	80%	\$43,856	\$87.13		10.0	3.4	4.8

Scenerio 3: Balanced Force Structure-Decentralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	Proposed	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL			
9.6	1:05	1:30	2:36	147	55		29	Baseline	Moody BDL	
7.7				78	83			Proposed		
6.4	2:03	3:14	5:17	23	111		20	Baseline	Mountain Home BDL	
9.6				71	131			Proposed		
20.5	5:56	14:03	19:59	11	420		44	Baseline	Nellis R-BDL	
30.1				169	463			Proposed		
28.8	6:05	11:10	17:15	243	362		10	Baseline	Offutt R-BDL	
28.2				219	372			Proposed		
9.0	2:29	3:52	6:21	55	133		31	Baseline	Patrick BDL	
12.2				91	164			Proposed		
240.6	20:19	113:20	133:40	2249	2805			Baseline	Peterson ADL	
				0				Proposed		
9919 : (Skilled Labor hours) of product are not accomplished, annually.										
12.8	1:46	4:10	5:57	144	125		6	Baseline	Peterson BDL	
10.9				98	131			Proposed		
14.1	2:18	3:18	5:36	178	118		44	Baseline	Pope BDL	
12.2				94	162			Proposed		
12.2	5:44	7:34	13:19	0	280		29	Baseline	Randolph BDL	
19.8				108	309			Proposed		
14.1	3:24	7:44	11:08	62	234		9	Baseline	Robbins BDL	
18.6				147	243			Proposed		
30.7	8:06	10:35	18:42	253	393		10	Baseline	Scott R-BDL	
31.4				256	403			Proposed		

Scenario 3: Balanced Force Structure-Decentralized

<div style="display: flex; flex-direction: column; gap: 5px;"> Withdraw Staffing Reduce Staffing Increase Staffing No Change Change in Skill Level </div>		If this is a baseline evaluation, place a " 1 " in the adjacent cell - AB2.										
		4Y0X2 Staffing				Utilization Estimate	Monthly Federal Labor Cost	Federal Labor Cost Per Product Hour Produced	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Estimated Treatment Cycle Times (Workdays)	±1SD	±2SD
E7-E6 7-Level	E5-E4 5-Level	E3-E2 3-Level	Total									
Seymour Johnson BDL	Baseline	5			5	80%	\$30,412	\$96.63	255	9.1	3.1	4.4
	Proposed	4			4	80%	\$24,330	\$76.46		12.3	4.2	5.9
Shaw BDL	Baseline	2	2		4	80%	\$20,965	\$73.84	333	13.0	4.4	6.2
	Proposed	4	2		6	80%	\$33,130	\$79.61		12.5	4.3	5.9
Sheppard R-BDL	Baseline	3	4	3	10	80%	\$45,337	\$77.01	502	12.9	4.4	6.2
	Baseline	3	4	3	10	80%	\$45,337	\$72.29		14.2	4.8	6.8
Tinker BDL	Baseline	4	1	2	7	80%	\$35,057	\$78.91	379	12.5	4.3	6.0
	Baseline	4	1	2	7	80%	\$35,057	\$74.03		13.7	4.7	6.5
Travis R-BDL	Baseline	4	4	3	11	80%	\$51,420	\$57.94	758	18.8	6.4	8.9
	Proposed	6	5	3	14	80%	\$67,985	\$71.79		13.9	4.7	6.6
Tyndall BDL	Baseline	1	2		3	80%	\$14,882	\$52.11	344	32.3	11.0	15.4
	Proposed	3	2	1	6	80%	\$30,211	\$70.27		14.5	5.0	6.9
USAF Academy R-BDL	Baseline	3	2	1	6	80%	\$30,211	\$53.86	649	20.5	7.0	9.8
	Proposed	6	4	3	13	80%	\$63,585	\$78.35		13.2	4.5	6.3
Vance BDL	Baseline		1		1	80%	\$4,400	\$88.22	53	9.2	3.2	4.4
	Proposed	1			1	80%	\$6,082	\$92.52		9.5	3.2	4.5
Vandenburg BDL	Baseline	1			1	80%	\$6,082	\$51.72	149	35.0	11.9	16.7
	Proposed	2	1		3	80%	\$16,565	\$88.71		9.9	3.4	4.7
Whiteman BDL	Baseline	1	2		3	80%	\$14,882	\$114.56	115	7.1	2.4	3.4
	Baseline	1	2		3	80%	\$14,882	\$103.35		8.3	2.8	4.0
Wright Patterson R-BDL	Baseline	4	4	1	9	80%	\$45,093	\$81.42	478	11.6	4.0	5.6
	Proposed	4	4	3	11	80%	\$51,420	\$86.03		11.3	3.9	5.4
Manning	Baseline	164	111	61	336					Baseline: Daily Capacity (Hours)		
	Proposed	164	111	61	336					Proposed: Daily Capacity (Hours)		
	Balance	0	0	0	0							
Annual Federal Labor Cost							\$20,146,573	\$14,903,465	Baseline			
Proposed Annual Federal Labor Cost							\$20,146,573	\$16,117,259	Proposed			
Annual Federal Labor Cost Savings							\$0	\$ (1,213,793)	Savings / (Loss)			

Scenerio 3: Balanced Force Structure-Decentralized

Daily Capacity (Hours)	Activity Driver: Daily Averaged Workload Input (HH:MM)			Capacity Loss to MHS (Hours)	Monthly Work Distrubution (Hours)			Baseline	Proposed	
	Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total		BDL	Dental Clinic	To ADL			
22.4	3:57	8:01	11:59	219	252		3	Baseline		Seymour Johnson BDL
17.9				122	255				Proposed	
15.4	3:29	7:19	10:49	95	227		106	Baseline		Shaw BDL
24.3				178	333				Proposed	
32.0	7:02	15:24	22:26	201	471		31	Baseline		Sheppard R-BDL
32.0				170	502				Baseline	
25.0	5:03	11:52	16:56	169	355		23	Baseline		Tinker BDL
25.0				145	379				Baseline	
36.5	11:29	22:20	33:50	56	710		48	Baseline		Travis R-BDL
48.6				264	758				Proposed	
10.9	4:18	10:09	14:27	0	303		41	Baseline		Tyndall BDL
21.8				113	344				Proposed	
21.8	6:23	14:59	21:23	8	449		201	Baseline		USAF Academy R-BDL
45.4				305	649				Proposed	
3.2	0:52	1:01	1:54	27	40		13	Baseline		Vance BDL
4.5				41	53				Proposed	
4.5	2:38	3:06	5:45	0	121		29	Baseline		Vandenburg BDL
12.2				106	149				Proposed	
10.9	1:56	3:00	4:57	125	104		11	Baseline		Whiteman BDL
10.9				113	115				Baseline	
32.6	6:44	14:22	21:06	242	443		35	Baseline		Wright Patterson R-BDL
36.5				288	478				Proposed	
1207	Baseline Annual: Capacity (Hours) Lost			100003	13352	0	0			
1207	Proposed Annual: Capacity (Hours) Lost			105459			0		←	Total to ADL
0	Annual Capacity (Hours) Gained			(5455)	Hours of Work-----Hours of Work					
	ANNUAL Capacity Gain / (Loss) to MHS				Performed In BDL Monthly	Performed In Dental Clinic (Monthly)	Sent To ADL (Monthly)			
	(5455)									
					Work Distribution					

Scenario 3a: Decentralized, Delivery Cycletime Performance

Delivery Cycletime Performance (Workdays)								
Base	Baseline				Proposed			
	Mean	±1SD	±2SD	"Worst Case"	Mean	±1SD	±2SD	"Worst Case"
1 Altus BDL	12	4	6	18.18	10	4	5	15.41
2 Andrews BDL	14	5	7	21.03	12	4	6	17.59
3 Barksdale R-BDL	23	8	11	34.13	10	4	5	15.32
4 Beale BDL	12	4	6	17.72	8	3	4	12.21
5 Bolling R-BDL	13	4	6	18.77	13	4	6	19.21
6 Brooks BDL	6	2	3	8.29	12	4	6	17.29
7 Cannon BDL	13	4	6	19.02	13	4	6	18.66
8 Charleston BDL	17	6	8	25.43	17	6	8	24.39
9 Columbus BDL	11	4	5	16.19	16	6	8	24.06
10 Davis Montham BDL	13	4	6	18.47	12	4	6	17.64
11 Dover BDL	11	4	5	16.13	10	3	5	14.84
12 Dyess BDL	8	3	4	11.24	10	4	5	15.41
13 Edwards BDL	16	5	8	23.40	12	4	5	17.01
14 Eglin R-BDL	12	4	6	18.20	14	5	7	20.42
15 Ellsworth BDL	9	3	4	13.42	11	4	5	16.97
16 Kelly BDL	6	2	3	8.89	13	4	6	18.85
17 Fairchild BDL	12	4	6	18.36	14	5	7	20.45
18 FE Warren BDL	23	8	11	33.90	11	4	5	15.52
19 Goodfellow BDL	6	2	3	9.24	9	3	4	13.06
20 Grand Forks BDL	21	7	10	30.50	13	5	6	19.85
21 Hanscom BDL	14	5	7	20.70	8	3	4	12.34
22 Hill BDL	7	2	3	9.73	14	5	7	21.00
23 Hollowman BDL	4	1	2	6.15	11	4	5	16.87
24 Hurlburt BDL	31	11	15	45.73	13	4	6	18.80
25 Keesler R-BDL	7	2	3	10.30	12	4	6	18.12
26 Kirtland BDL	15	5	7	21.98	10	3	5	14.16
27 Lackland R-BDL	14	5	7	21.21	11	4	5	16.18
28 Langley R-BDL	21	7	10	31.27	13	4	6	18.59
29 Laughlin BDL	16	6	8	24.34	12	4	6	18.30
30 Little Rock BDL	21	7	10	30.90	13	4	6	18.50
31 Los Angles BDL	40	14	19	59.49	10	4	5	15.50
32 Luke BDL	10	4	5	15.24	12	4	6	17.44
33 Malmstrom BDL	5	2	2	7.39	8	3	4	12.22
34 Maxwell BDL	47	16	22	68.78	14	5	7	21.02
35 McChord BDL	15	5	7	22.76	10	4	5	15.33
36 McConnell BDL	14	5	7	21.23	11	4	5	16.10

Scenario 3a: Decentralized, Delivery Cycletime Performance

Delivery Cycletime Performance (Workdays)									
Base		Baseline				Proposed			
		Mean	±1SD	±2SD	"Worst Case"	Mean	±1SD	±2SD	"Worst Case"
37	McDill BDL	13	5	6	19.59	15	5	7	21.62
38	McGuire BDL	7	2	3	10.26	11	4	5	16.16
39	Minot BDL	8	3	4	11.58	12	4	6	18.37
40	Moody BDL	4	1	2	5.49	9	3	4	13.51
41	Mountain Home BDL	16	5	7	23.08	12	4	6	17.22
42	Nellis R-BDL	20	7	10	29.95	14	5	7	20.71
43	Offutt R-BDL	10	4	5	15.25	11	4	5	16.35
44	Patrick BDL	13	4	6	18.52	12	4	6	17.13
45	Peterson ADL	15	5	7	21.85	0	0	0	0.00
46	Peterson BDL	8	3	4	11.74	10	3	5	15.14
47	Pope BDL	6	2	3	8.71	12	4	5	17.00
48	Randolph BDL	25	8	12	36.50	13	5	6	19.70
49	Robbins BDL	15	5	7	22.47	11	4	5	16.70
50	Scott R-BDL	10	3	5	14.52	10	3	5	14.76
51	Seymour Johnson BDL	9	3	4	13.50	12	4	6	18.13
52	Shaw BDL	13	4	6	19.14	12	4	6	18.41
53	Sheppard R-BDL	13	4	6	19.12	14	5	7	20.94
54	Tinker BDL	13	4	6	18.49	14	5	7	20.23
55	Travis R-BDL	19	6	9	27.70	14	5	7	20.53
56	Tyndall BDL	32	11	15	47.77	15	5	7	21.46
57	USAF Academy R-BDL	20	7	10	30.22	13	5	7	20.12
58	Vance BDL	9	3	4	13.66	9	3	5	14.01
59	Vandenburg BDL	35	12	17	51.64	10	3	5	14.58
60	Whiteman BDL	7	2	3	10.42	8	3	4	12.29
61	Wright Patterson R-BDL	12	4	6	17.20	11	4	5	16.72

Systems Perspective- Delivery Cycletime Performance (Work Days)					
		±1SD	±2SD	"Worst Case"	
Baseline	Mean:	14.6	5	7	21.6
	Mode:				#N/A
	Min:				5.5
	Max:				68.8
Proposed	Mean:	11.6	4	6	17.2
	Mode:				#N/A
	Min:				0.0
	Max:				24.4

Scenerio 3b: Decentralized, Monthly Capacity Loss

CONUS Facilities- Monthly Capacity Loss (Hours)			
	Base	Baseline	Proposed
1	Altus BDL	18	56
2	Andrews BDL	127	241
3	Barksdale R-BDL	0	209
4	Beale BDL	43	135
5	Bolling R-BDL	145	176
6	Brooks BDL	95	27
7	Cannon BDL	55	83
8	Charleston BDL	16	25
9	Columbus BDL	24	11
10	Davis Montham BDL	145	195
11	Dover BDL	68	158
12	Dyess BDL	82	65
13	Edwards BDL	30	98
14	Eglin R-BDL	219	172
15	Ellsworth BDL	62	92
16	Kelly BDL	54	14
17	Fairchild BDL	63	53
18	FE Warren BDL	0	126
19	Goodfellow BDL	36	30
20	Grand Forks BDL	1	37
21	Hanscom BDL	30	128
22	Hill BDL	175	39
23	Hollowman BDL	142	32
24	Hurlburt BDL	0	114
25	Keesler R-BDL	539	207
26	Kirtland BDL	45	135
28	Langley R-BDL	0	305
29	Laughlin BDL	10	31
30	Little Rock BDL	0	80
31	Los Angles BDL	0	106
32	Luke BDL	133	115
33	Malmstrom BDL	150	120
34	Maxwell BDL	0	118
35	McChord BDL	31	92
36	McConnell BDL	32	81

Scenerio 3b: Decentralized, Monthly Capacity Loss

37	McDill BDL	78	174
38	McGuire BDL	219	112
39	Minot BDL	179	78
40	Moody BDL	147	78
41	Mountain Home BDL	23	71
42	Nellis R-BDL	11	169
43	Offutt R-BDL	243	219
44	Patrick BDL	55	91
46	Peterson BDL	144	98
47	Pope BDL	178	94
48	Randolph BDL	0	108
49	Robbins BDL	62	147
50	Scott R-BDL	253	256
51	Seymour Johnson BDL	219	122
52	Shaw BDL	95	178
53	Sheppard R-BDL	201	170
54	Tinker BDL	169	145
55	Travis R-BDL	56	264
56	Tyndall BDL	0	113
57	USAF Academy R-BDL	8	113
58	Vance BDL	27	41
59	Vandenburg BDL	0	106
60	Whiteman BDL	125	113
61	Wright Patterson R-BDL	242	288
27	Lackland R-BDL	778	1544
45	Peterson ADL	2249	0

Annual Capacity Loss (Hours) - A Systems Perspective, Less Peterson ADL, and Lackland R-BDL		
Baseline:	Mean:	63682
	MAX:	6469
	MIN:	0
Proposed:	Mean:	84622
	MAX:	3664
	MIN:	136

Scenario 3c: Decentralized, Federal Labor Cost per Product Hour

CONUS Facilities- Federal Labor Cost Per Product Hour			
	Base	Baseline	Proposed
1	Altus BDL	\$71.47	\$89.39
2	Andrews BDL	\$70.04	\$81.76
3	Barksdale R-BDL	\$57.30	\$92.66
4	Beale BDL	\$77.36	\$109.87
5	Bolling R-BDL	\$72.65	\$73.98
6	Brooks BDL	\$125.73	\$72.96
7	Cannon BDL	\$73.05	\$77.04
8	Charleston BDL	\$62.70	\$61.64
9	Columbus BDL	\$81.73	\$63.00
10	Davis Montham BDL	\$77.42	\$81.54
11	Dover BDL	\$81.00	\$94.65
12	Dyess BDL	\$106.34	\$87.14
13	Edwards BDL	\$171.36	\$197.53
14	Eglin R-BDL	\$80.70	\$74.21
15	Ellsworth BDL	\$84.49	\$81.18
16	Kelly BDL	\$113.77	\$66.19
17	Fairchild BDL	\$79.01	\$73.44
18	FE Warren BDL	\$55.04	\$93.04
19	Goodfellow BDL	\$114.50	\$94.78
20	Grand Forks BDL	\$52.29	\$72.26
21	Hanscom BDL	\$67.62	\$103.79
22	Hill BDL	\$130.43	\$68.45
23	Hollowman BDL	\$183.47	\$78.12
24	Hurlburt BDL	\$51.72	\$77.44
25	Keesler R-BDL	\$128.00	\$80.32
26	Kirtland BDL	\$64.81	\$89.24
27	Lackland R-BDL	\$71.59	\$89.68
28	Langley R-BDL	\$54.13	\$79.61
29	Laughlin BDL	\$61.87	\$76.72
30	Little Rock BDL	\$52.11	\$75.51
31	Los Angeles BDL	\$51.72	\$88.56
32	Luke BDL	\$88.69	\$80.73
33	Malmstrom BDL	\$152.65	\$109.46
34	Maxwell BDL	\$51.72	\$71.25
35	McChord BDL	\$64.13	\$87.23
36	McConnell BDL	\$64.88	\$80.81

Scenario 3c: Decentralized, Federal Labor Cost per Product Hour

37	McDill BDL	\$68.68	\$70.58
38	McGuire BDL	\$109.66	\$79.61
39	Minot BDL	\$116.46	\$79.01
40	Moody BDL	\$200.10	\$100.80
41	Mountain Home BDL	\$66.61	\$83.27
42	Nellis R-BDL	\$54.40	\$72.85
43	Offutt R-BDL	\$86.59	\$84.82
44	Patrick BDL	\$72.98	\$80.63
45	Peterson ADL	\$94.77	\$0.00
46	Peterson BDL	\$115.52	\$91.12
47	Pope BDL	\$133.95	\$81.91
48	Randolph BDL	\$51.89	\$70.11
49	Robbins BDL	\$67.47	\$84.99
50	Scott R-BDL	\$86.36	\$87.13
51	Seymour Johnson BDL	\$96.63	\$76.46
52	Shaw BDL	\$73.84	\$79.61
53	Sheppard R-BDL	\$77.01	\$72.29
54	Tinker BDL	\$78.91	\$74.03
55	Travis R-BDL	\$57.94	\$71.79
56	Tyndall BDL	\$52.11	\$70.27
57	USAF Academy R-BDL	\$53.86	\$78.35
58	Vance BDL	\$88.22	\$92.52
59	Vandenburg BDL	\$51.72	\$88.71
60	Whiteman BDL	\$114.56	\$103.35
61	Wright Patterson R-BDL	\$81.42	\$86.03

Monthly, Federal Labor Cost per Product Hour - A Systems Perspective		
Baseline:	Mean:	\$85.23
	MAX:	\$200.10
	MIN:	\$51.72
Proposed:	Mean:	\$82.55
	MAX:	\$197.53
	MIN:	\$0.00

Dental Laboratory IPT

Study Results: Comparative Table of Annual CONUS Product Skilled Labor Hours

	BDL/R-BDL	Clinic	ADL
Baseline	136,608 hrs	0	33,660 hrs
Centralized	130,224 hrs	*2,820 hrs (ET)	37,212 hrs
Decentralized	160,224 hrs	0	(*9,919 hrs)

* Enabling tasks (ETs) are fundamental lab tasks (e.g. pouring /trimming models)

*USA and USN will need to find other lab support

Dental Laboratory IPT

Study Results: Comparative Table of Annual CONUS Federal Labor Cost and Cycle Time Performance

	Annual Labor Cost Gained/(Lost)	Labor/Product Cost Per Hour	Cycle Times in Workdays Mean/Worst Case
Baseline	\$000	\$85.23	14.6/21.6
Centralized	\$570,014	\$61.97	13.9/20.5
Decentralized	(*\$1,213,793)	\$82.55	11.6/17.2

*Does not included \$843,115 loss of CONUS support to DoD (USA and USN)

USA and USN will need to find other lab support

Dental Laboratory IPT

*Match Customer's Desired Product Cycle Time/Appointment Availability
with*

Laboratory Costs/Cycle Times

Decision Matrix

<i>Decision Matrix</i>					
	<i>Customer's Expectations</i>		<i>Laboratory Constraints</i>		Total
	<i>Meets Desired Cycle Time</i>	<i>Appointment Availability</i>	<i>Reduces Costs</i>	<i>Improves Cycle Time</i>	Yes/No
Baseline	Yes	Yes	No	No	2/2
Centralized	Yes	Yes	Yes	Yes	4/0
Decentralized	Yes	Yes	No	Yes	3/1

Centralized ABS Model: Manpower Reallocation

A consequence of the centralized ABS model is that ten bases (Table 1) would lose local dental laboratory support, as determined by workload requirements at the base level. This laboratory support would be provided to the bases in the following manner: dental assistants at each base completing the ETs; servicing ADL completing the METs. Dental assistants are currently trained to provide ET support, and would be fully optimized according to the Dental Care Optimization concept. The ADL would provide MET support, to include the development and staffing of stone work, pindexing and mounting services for these bases.

Technicians (N), Relocated under ABS Model	Activity Driver: Monthly Averaged Workload (Hours) Produced Locally	Current Monthly, Federal Labor Cost of Assigned 4Y0X2s	Activity Driver: Daily Averaged Workload Input (HH:MM)			Monthly Work Distribution (Hours)	
			Enabling Tasks (ETs)	Mission Essential Tasks (METs)	Total	Performed in Dental Clinic by 4Y0X1s	To ADL
Altus BDL (1)	49	\$4,400	1:08	1:12	2:20	24	25
Brooks BDL (2)	67	\$10,482	1:32	1:38	3:10	32	34
Columbus BDL (1)	43	\$4,400	0:47	1:15	2:03	17	26
Kelly BDL (2)	53	\$7,563	1:29	1:02	2:32	31	22
Goodfellow BDL (1)	31	\$4,400	0:43	0:44	1:27	15	15
Holloman BDL (3)	60	\$13,646	1:09	1:40	2:50	24	35
Laughlin BDL (1)	57	\$4,400	0:55	1:47	2:42	19	38
Malstrom BDL (3)	78	\$14,882	1:28	2:14	3:43	31	47
Moody BDL (3)	55	\$13,646	1:05	1:30	2:36	23	32
Vance BDL (1)	40	\$4,400	0:52	1:01	1:54	18	21
Totals: 18 Personnel				14:03			295

Table 1. Bases identified for manpower reallocation based on the monthly averaged productivity between 1 Mar 04 and 31 Apr 04.

Providing Prosthodontic Services Through Outsourcing At the Systems Level-Issues and Challenges

At the Peterson ADL, satisfying customer timeliness expectations, as well as ASD/HA access to care standards, is heavily influenced by the total demand for services submitted by the 60-plus Air Force, Army and Navy dental clinics located in CONUS and abroad. There are frequent, sustained instances when the phenomena known as “the tragedy of the commons” occurs, wherein a seemingly “free” service is available, and it becomes over utilized. The consequence is that the “universal and cost free” resource, which the ADL represents, cannot sustain performance expectations. Triggered by over utilization measured in hours of demand, the ADL experiences lengthened production cycle times that satisfies no one and exceeds ASD/HA guidelines.

Using information technology, the ADL can confidently predict production cycle times given the measurement of capacity and demand, however as the final treatment referral asset, the ADL is not resourced to proactively address anticipated cycle time performance estimates exceeding 28 calendar days, except for a heavier levy of utilization time imposed upon the staff. Commercial outsourcing is a viable avenue to offset this constraint and address Military Health System (MHS) excess demand, when such circumstances exist. Measured amounts of demand can be diverted to the commercial market place for fabrication, while keeping the balance of ADL demand and performance within treatment cycle time specifications.

The principle challenge of outsourcing work, while simultaneously providing “in-house” prosthodontic services, is the management of the productive capacity of the Base Dental Laboratories (BDLs), Residency-BDLs (R-BDLs), and Area Dental Laboratory (ADL) in light of ever evolving treatment demand circumstances. The direct, comprehensive management of capacity, to satisfy requesting providers’ timeliness expectations, further reduces itself to the calculation of task proficiency, numbers of personnel assigned, and utilization, which in turn point to identifiable personnel costs and measurable treatment cycle time metrics. Complicating this oversight function is the variable demand circumstances that may be prevalent at any moment in time in the

military, dental laboratory system which imposes spot and long term performance trade-offs influencing the following: managerial-cost per product hour, timeliness, and capacity issues.

Operationally speaking, when demand is below the trigger point of a 28 calendar day cycle time, the ADL would retain the work. When the cycle time exceeded the trigger point, measured outsourcing of demand would be initiated. As an aside, to be compliant with OMB Circular A-123, Management Accountability and Control, ADL leadership must necessarily bring the ADLs performance right up to the failure horizon of ASD/HA policy expectations, which implies the intentional design and imposition of performance stress (and potential failure) upon the staff. Manpower idleness or Parkinson's Law must be understood as an anathema to high performance institutional aspirations and the ADL must continually embrace the calculated likelihood of failure when it comes to customer expectations of timeliness. Only then, in an environment of performance stress, should excess demand be diverted to the commercial sector.

The Federal Acquisition Regulation (FAR), Defense FAR, Air Force FAR, applicable Air Force Instructions (AFI), and local contracting officers are the primary governing authorities for the sourcing and acquisition of supplies, equipment and services in the Federal Government. Multiple contracting instruments, such as the Government Purchase Card (GPC), and contracts like indefinite-delivery, indefinite-quantity (IDIQ), fixed price Blanket Purchase Agreements (BPAs) can be utilized for dental laboratory services, premised upon satisfying specific policy guidelines, which dictate the preparatory procedures prior to contract award and the expenditure of taxpayer provided funds.

At the Military Health Systems (MHS) level, these contracting instruments can materially augment health care delivery, while satisfying ASD/HA policy expectations. Outsourcing to commercial dental laboratories can assist in posturing dental laboratory prosthodontic services to meet customer expectations of timeliness at the clinic level, if acquisition planning, contract development, and execution are properly done-in parallel with the thoughtful structuring and operational management of CONUS military treatment assets. Such planning is necessary to keep contract costs and administrative overhead at responsible and justifiable levels.

Two instruments are available in the federal system for outsourcing of dental laboratory services; they are the GPC, and a Performance-Based Service Contract. Of the two instruments, the GPC is the least viable for legal and policy reasons. The GPC is designed for “micro-purchases” of \$2,500.00 or less, applicable to supplies, equipment and service “buys” that are infrequent in nature. While the definition of “infrequent” is substantially undefined in the FAR or in AFI 64-117, Air Force Government-Wide Purchase Card Program, both documents state that when the likelihood of multiple purchases is reasonably anticipated, provisions must be made to rotate orders among multiple vendors to equitably distribute the desired economic benefit of taxpayer provided funds in the targeted market sector. The purchase of dental laboratory services, envisioned as a strategy to avoid ASD/HA policy failure, at the systems level, can’t be understood as an infrequent event, nor would it be prudent to purchase custom made dental devices on an indiscriminate, rotating basis among multiple commercial dental laboratories-for a host of pragmatic reasons. Finally, the simplified acquisition threshold will be exceeded, in the aggregate, if one prudently and simply tracks expenditures on an annualized basis.

Given that a recurring service, initiated at regular intervals is anticipated, the acquisition must comply with the Competition in Contracting Act, Buy American Act/Economy Act, Service Contract Act, and the Federal, Small Business Set-Aside Program. Not doing so, invites an agency or General Accounting Office protest by interested parties, namely excluded commercial dental laboratory firms having a direct economic interest, with the resolution risking-in its worst case scenario-mandated use of excluded parties with substantially diminished AF Dental Corps oversight and control of the resulting deliverables. This is so because there are few, if any, established standard commercial practices governing this unregulated industry. Absent expressed or implied warranties, alternative dispute resolution or adjudication under the Uniform Commercial Code-as accepted and modified in the various states-has to be used and is the principle legal recourse. The AF Dental Corps ought not want to enter these waters.

Entering the commercial, dental laboratory market is not like a trip to the local hardware store. Valuing and evaluating custom manufactured dental devices is much more complex than pricing and purchasing standardized off-the-shelf manufactured

commodities. Nevertheless, all markets present the buyer with similar challenges: the need to be explicit about what one is shopping for in terms of quality and timeliness, the need to make intelligent comparisons among and between possible choices, and the need to know when the price one is hoping to pay simply will not obtain the necessary level of quality one expects. Nor can the dental corps, capriciously terminate or initiate commercial relationships with small businesses, as our actions may determine their continued viability, and they have considerable rights both politically and under the FAR.

To substantially address the GPC constraints and risks, the FAR encourages, and AFI 63-124, Performance-Based Service Contracts (PBSC) advances PBSC as applicable to all service acquisitions above the simplified acquisition threshold. To exercise this option considerable acquisition planning is required and while time consuming, a well-crafted solicitation and contract may be a benchmark document for this industry, which employs in excess of 40,000 individuals across the country. It will frame, if not define, the desired, optimal relationship between licensed providers and the unregulated industry of dental laboratory technology at the national level. This assertion is based on the fact that the request for proposal (RFP), offered in compliance with FAR 6.1 Policy requires full and open competition, which will necessitate that the RFP be advertised in the Commerce Business Daily, and national dental laboratory publications, prompting significant interest and requests for the RFP from across the nation.

The RFP will need to contain, a performance work statement (PWS), which will define what is to be done in terms of the required quality level or standard of acceptable performance for the many custom made, dental deliverables. Secondly, a performance requirements summary (PRS) specifying timeliness expectations, which can be tailored to satisfy ASD/HA access to care expectations needs to be authored. Third, both the PWS and PRS will provide the architecture to develop the quality assurance surveillance plan (QASP) that will quantify the firms' level of service compliance, upon contract award. Government quality assurance is necessary because of the nature and importance of the care delivered and the QASP must be explicit, as 44% of laboratory owners find it difficult to acquire competent staff, and 68% of providers in the commercial sector, who have terminated relationships, identify quality and technical problems as the reason.² The

² LabManager Today, April 2003, Pgs 6-8.

QASP is the government's principle defense against poor performance and will define the circumstances leading up to a formal cure notice or the determination of "material default", allowing the Dental Corps to legally terminate the contract, with a specific firm for cause or convenience-if required.

Vetting the firms, to determine eligibility to be awarded a contract will be based on the QASP, past performance information (PPI) evidencing past compliance with the QASP, and perhaps other non-cost factors such as the contractor's internal quality control plan, and the credentials of employees (such as the ratio of CDTs to total employees or being a NADL Certified Dental Laboratory). When PPI and other non-cost factors are needed to evaluate potential vendors, it is requested in the solicitation. Once provided by the interested firm, it will evidence their ability to satisfy the contract specifications. The contracting officer, and source selection officers (SSOs) will use this information to identify responsive, responsible offerors for possible contract award. Weighted source selection criteria, adjectival ratings or other evaluative techniques will also need to be published in the RFP, to inform offerors of how the SSOs will evaluate pricing, PPI and other non-cost factors to determine best value, and the resulting rankings of the responsible offerors.

Because of the nature of the industry, where full-service and specialized firms exist and compete among each other, and the capacity resources (number of employees) is highly variable with 81% of firms having 5 or less employees, capacity becomes an issue.³ Equally vexing is MHS excess demand; thus, no one commercial source is likely to be immediately available and responsive to specific purchase order deliveries or calls. In other words, the government should not "set-up" a small business concern for failure, in light of the QASP and the subsequent transferring of variable demand, exceeding the firms productive capacity-as they have ongoing relationships with private practice dental providers. Thus, multiple contract awards under a governing BPA is likely the most efficient contract vehicle because the governing service delivery schedule, has to be realistically applied to small business concerns of limited and variable capacity. Applicable factors the government must consider include; the urgency of need on the government's part, current capabilities (market conditions) of the small business concern,

³ LabManager Today, April 2003, Pgs 6-8

production time, transportation time and time for contractors to comply or overcome any conditions precedent to performance, as outlined in FAR 11.402. This last factor identifying “conditions precedent to performance” entails that the government establish submission standards of casework considered for transfer to the commercial market, not unlike what the ADL attempts to do as a matter of routine when it accepts work from submitting dental clinics.

Once a list of qualified contractors is identified and awarded contracts under the BPA with established pricing of goods and services, a reverse auction mechanism could be implemented, not on the basis of price but rather on the basis of timeliness of delivery, under the governance of the QASP and ASD/HA access to care standards, allowing the ADL the freedom to select the most responsive contractor to expedite the dental appliances return to the original submitting clinic. A reverse auction satisfies our corporate needs for a high quality product (based on the QASP and PWS) delivered in a timely manner, as well as accommodates the variable capacity constraints likely to exist among our selected supporting vendors.

As to contract pricing of the individual, product line items contained in the description of services within the RFP, and the hundreds of transactions or calls it may represent.⁴ The Dental Corps, Dollar Weighted Laboratory Values (DWLV) menu of products offered to dental clinics is a good, initial starting point to determine the full range of products desired from the market place. Later pricing determinations, based on open market competition-compliant with Federal Law and policy-will put to rest the contentious issue of quality and price. Market research, pricing surveys, single point observations and opinions fade in the face of price realism, as determined by the market. Once known, and periodically updated⁵, the market will determine the value of the goods and services the military dental laboratory system provides, on the basis of its own in-house activities. This is superior to estimates, and it will be based on defined qualitative standards, and timeliness expectations outlined in the RFP that ought to mirror in-house performance expectations.

⁴ The Air Force Dental Laboratory system (CONUS) completed 579,763 technical transactions for 208,763 skilled man-hours of credited work, and the Peterson ADL completed 70,130 transactions for 33,635 man-hours from 1 April 2003 to 31 March 2004.

Adding to this real world, pricing mechanism an RFP provides, is the additional benefit of introducing commercial firms to the Fair Labor Standards Act, and the Service Contract Act requiring Department of Labor wage determinations that include prevailing fringe benefits such as medical care, pensions, etcetera. Commercial firms will be expected to be in material compliance with law and federal policy expectations, as contract clauses specifying this will be included in the RFP. This may be problematic, and “shake out” many firms as sixty percent or more dental laboratory firms (principally the smaller, limited capacity enterprises if demographic statistics hold) do not offer fringe benefits such as; paid maternity leave, flexible health care spending plans, 401(k) pension plans, vision insurance, disability insurance, dental insurance, pension or profit sharing plans, health insurance or paid holidays. All of which function to increase the fee schedules offered by the commercial firms. In effect, the AF Dental Corps will be closer to comparing “apples to apples”, when it evaluates the total value of our military enterprise.

This outsourcing proposal is premised upon a centralized, dental laboratory structure where demand, beyond the timeliness capacity of the CONUS BDLs and R-BDLs is forwarded to the ADL where in-house task performance or outsourcing can be determined on a measured, situational basis. This vertically integrated, tiered structure naturally disciplines operational oversight if performance reviews are done at the BDL and R-BDL levels, as exemplified by the Dental Laboratory IPT, business case analysis provided in this report.

At the ADL, funding for outsourcing actions could be centrally controlled, as well as contract administration of the QASP, invoice reconciliation, payments and other administrative activities. This approach allows dentists to perform dentistry, and technicians to support them at the BDL level, with the option to transship to the ADL when local circumstances impose it. The ADL on the other hand can exercise the tactical management of demand, while fully engaging its staff to satisfy ASD/HA expectations.

⁵ DWLVs have not been updated since their inception and the Consumer Price Index-Dental has experienced a 25% increase in the 1998 to 2003 time period.

**Performance Management: DWLVs and CLVs,
Purpose Built for Different Complimentary Uses**

Dollar Weighted Laboratory Values (DWLVs) and Composite Laboratory Values (CLVs) are both attached to the list of goods and services the military, dental laboratory system provides and they ought not be construed as an “either/or” proposition. DWLVs identify the commercial value of services rendered, while CLVs measure the skilled labor content of the tasks required for the provisioning of patient care deliverables.

Dental laboratory technology is a manufacturing enterprise, and the management of treatment demand requires a method to measure variable levels of past production activity as well as estimate anticipatory performance that only manufacturing demand and capacity calculations can provide. CLVs provide such a mechanism to differentiate variable levels of man-hour productivity, which is absolutely necessary for accountability and control of human resource assets, as they are distributed across CONUS dental facilities to optimize institutional performance. Performance management, monitoring, and optimization are a constant operational activity. In addition, CLVs can be instrumental in determining proficiency levels of staff, developmental time to proficiency, cycle time performance and a host of other applications, such as time-to-market and innovation rates. Finally, in modern industrial enterprises the measurement of the labor content of tasks precedes pricing.

DWLVs on the other hand, transition to a balance sheet, profit or loss statement that may or may not be perfectly aligned to the true value of the goods and services delivered. Pricing is discretionary, based on innumerable market factors. It too, is used to measure performance, however, formal statements are scheduled events at separable points in time. DWLVs do not immediately influence performance, to the extent that CLVs can. The laboratory industry does not report pricing for goods and services as the dental profession currently does, which makes the establishment and maintenance of DLWV values a futile and inaccurate task.

Both DWLVs and CLVs address differing performance-monitoring objectives. AFI 90-1102, Performance Management is heavily weighted towards the evaluation of task performance, where quality, quantity and timeliness of performance are key

functional issues. CLVs compliment the AFI as the measurement mechanism supports continuous process improvement to enhance mission accomplishment.

In order to build the MMC to evaluate laboratory production and cycle times, the previous year's laboratory production, labor content, was required. Since production is currently reported as DLWVs, the product codes had to be converted to CLV codes to extract the amount of labor involved in the production of the laboratory services. If the MMC is used to determine future manning authorizations, then laboratory production will need to be reported as CLVs, or face an arduous task of converting DLWVs to CLVs each time manning is reviewed.

Technician Performance Activity Levels

The performance of technical services by assigned staff is essential to patient care scheduling and cycle time performance; yet formal OJT training is principally focused on simple task competency, driven by minimum time-in-training timelines. Competency determinations, leading up to the administrative award of higher skill levels simply relies upon demonstrated procedural understandings, coupled with basic “do’s and don’ts” outlined in published Qualification Training Packages or other text resources. Administrative awards, in no way point to the actual proficiency of technical duties performed. AFI 36-2618, Enlisted Force Structure¹, clearly states; NCOs must: “attain and maintain a skill level commensurate with their rank and maintain a high degree of proficiency (emphasis added) in their awarded specialty as outlined in their Career Field Education and Training Plan (CFETP).” Our CFETP, only goes as far as defining a high degree of proficiency by stating, “Can do the complete task quickly and accurately.”²

There is a lack of specificity in our CFETP, unsupportive of the intent contained in the AFI which points to the desired directionality of performance-best defined by established performance cycle times. The Malcolm Baldrige National Quality Award program defines cycle time as, “the time required to fulfill commitments or to complete tasks,” while going on to identify cycle time performance as having “great importance” and a “major role” in improving order fulfillment or delivery times. Composite Laboratory Values (CLVs) is the metric that can best define the highly skilled and proficient labor content of the goods and services delivered by dental technology.

Performance based assessments of skill level, if tied to information technology can build to anticipatory predictions of patient treatment times and this is fundamental to engineering staffing to accomplish specific ASD/HA expectations, for while dental technology is intimately tied to patient care, the care delivered is also a labor intensive, custom manufacturing activity. Simply put, proficiency assessments and real time performance measurements can translate into capacity calculations directed to achieve

¹Paragraph 4.1.2.

² CFETP 4Y0X2, Proficiency Code Key, Page 29

defined missions. One-time, “craft-based” competency assessments do not fit our emerging corporate needs.

Determining the performance time attached to dental technology goods and services (and therefore CLVs), needs to be based on a complete task analysis of each principle product type that breaks down the following five topics:

- A. Quality; defined in terms of,
 - a. Form,
 - b. Fit,
 - c. Function
 - d. Color (if applicable).
- B. Generalized Production Steps formatted like the Qualification Training Packages.
- C. Precedent Performance Conditions; defined in terms of,
 - a. Observed, Easy (E) taskings,
 - b. Average (A), and
 - c. Difficult (D) taskings,
- D. Frequency of Observations (f) of C.a,b,c (above), expressed in percentage terms, and finally the,
- E. Skilled Labor Content Assessments expressed in elapsed, direct labor time, determined by Subject Matter Experts (SMEs), selected among the cohort of 7-level Craftsman available in the career field. The SMEs consolidate their specific performance times and they become the benchmark values.

Lastly, the quantitative data contained in C, D and E is placed in mathematic form, such as:

$$\mathbf{f(E_t) + f(A_t) + f(D_t) = Skilled Labor Content \textit{ where,}}$$

f = frequency of observation,

E_t = time to complete Easy taskings,

A_t = time to complete Average taskings,

D_t = time to complete Difficult taskings

to finalize the performance times attached to specified patient driven, qualitative standards. When finalized, the entire menu of goods and services has skilled labor content time values attached to them and information technology can be applied to perform diagnostic assessments of skill as well as provide anticipatory predictions of production cycle times, independent of dental laboratory facility type (BDL, R-BDL and ADL).

Table 1, Performance Activity Levels (PAL), outlines a tiered performance matrix that is activity-based, rather than competency-based and specifies levels of productivity attached to variable skill levels.

Performance Activity Levels (PAL)			
Operational Assumptions		Duty Month: Utilization Direct Patient Care (DPC):	168 Hours 80 Percent 134 Hours
Adjectival Skill Level	Performance Ratio	Hours Product Delivered	Composite Laboratory Values (CLVs)
Master*:	1.0 X DPC =	134.0	1,340
Craftsman:	0.7 X DPC =	93.8	938
Journeyman:	0.5 X DPC =	67.5	675
Apprentice:	0.3 X DPC =	40.2	402
Trainee:	0.1 X DPC =	13.4	134

Table 1. Performance Activity Levels (PAL)

*While the enlisted force structure clearly identifies 7, 5, 3, and 1-skill levels, the “master technician” is inferred and clearly points to the desired directionality of performance all technicians should to aspire towards, in terms of demonstrated proficiency.

CLVs for the individual products and tasks performed by the technician are summed for a specified period (in this case a “month”, 168 hours or 21 work days), and then divided by the technician’s actual utilization time. Once the calculation is performed, a performance ratio is derived, attached to an adjectival skill level.

Two powerful consequences can be derived from this performance methodology. First, if you indeed have a “master” technician assigned, who additionally has 134 hours of product in inventory to perform, adding one additional hour of skilled labor to the inventory already in the queue, will entail the likelihood that it will be completed on the 22nd work day of the month. Thus, knowing the volume of work in the queue and a person’s proficiency level is evidence of the two independent variables needed to estimate delivery cycle times, for patient care scheduling (the dependent variable).

Secondly, if you don't know the developmental status of a technician, summing their aggregate production for a month, then dividing their utilization time will pin point their current status, with the potential for performance directionality being communicated.