U.S. Department of Transportation (DOT)
Federal Aviation Administration (FAA)
Section 804 Collaborative Workgroup

FAA National Facilities Realignment and Consolidation Report
Part 2 Recommendations

Response to U.S. Congress

FAA Reauthorization Bill

Public Law 112-95

Section 804

DRAFT DATE: May 11, 2016

Contents

Executive Summary 1

Introduction 2

Section 804 Collaborative Workgroup 2

Four-Step Process for Facilities Realignment Analysis 3

Report Scope 4

FAA Administrator's Recommendations 4

Recommendation #1: Realign Erie (ERI) TRACON Operations to Buffalo (BUF) 5

Background 5

Approach 5

Recommendation and Administrator's Justification 5

Projected Costs and Savings 6

Recommendation # 2: Realign Akron-Canton (CAK) and Mansfield (MFD) TRACON Operations to Cleveland (CLE) 7

Background 7

Approach 7

Recommendation and Administrator's Justification 7

Projected Costs and Savings 8

Recommendation #3: Realign Grand Rapids (GRR), Lansing (LAN), Muskegon (MKG), Flint (FNT) & Saginaw (MBS) TRACON Operations to Kalamazoo (AZO) 9

Background 9

Approach 10

Recommendation and Administrator's Justification 10

Projected Costs and Savings 10

Recommendation #4: Sustain and Maintain TRACON Operations at Toledo (TOL) 12

Background 12

Approach 12

Recommendation and Administrator's Justification 12

Projected Costs and Savings 12

Recommendation #5: Sustain and Maintain TRACON Operations at Youngstown (YNG) 14

Background 14

Approach 14

Recommendation and Administrator's Justification 14

Projected Costs and Savings 14
Proposed Timing for Implementation of Recommendations 16
Conclusion 16
Federal Register Publication 16

Executive Summary

A collaborative workgroup of representatives from the Federal Aviation Administration (FAA), the National Air Traffic Controllers Association (NATCA) and the Professional Aviation Safety Specialists (PASS) labor unions was established to analyze FAA's Terminal Radar Approach Control (TRACON) facilities for realignment, pursuant to Section 804 of the FAA Modernization and Reform Act of 2012 (P.L. 112-95).

The Section 804 collaborative workgroup conducted comprehensive analysis of TRACON operations by gathering and reviewing operational and technical requirements for facilities being reviewed, considering workforce impacts, gathering and evaluating stakeholder input, and estimating costs and benefits of potential realignments.

The workgroup developed, validated, and presented its realignment recommendations to FAA and labor union leadership, and drafted this report for the FAA Administrator's review and submission to Congress and the Federal Register.

The following recommendations are contained in this report:

1. Realign Erie, PA (ERI) TRACON operations to Buffalo, NY (BUF) Tower / TRACON
2. Realign Akron-Canton, OH (CAK) and Mansfield, OH (MFD) TRACON operations to Cleveland, OH (CLE) Tower / TRACON
3. Realign Grand Rapids, MI (GRR), Lansing, MI (LAN), Muskegon, MI (MKG), Flint, MI (FNT), and Saginaw, MI (MBS) TRACON operations to Kalamazoo, MI (AZO) Tower / TRACON
4. Sustain and maintain Toledo, OH (TOL) TRACON operations at the current location
5. Sustain and maintain Youngstown, OH (YNG) TRACON operations at the current location

Per statutory requirements, the justification and details for the collaboratively developed recommendations are provided in the sections below.

Introduction

Section 804 of the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (P.L. 112-95) requires the FAA to develop a plan for realigning and consolidating facilities and services in an effort to support the transition to NextGen, and to reduce capital, operating, maintenance, and administrative costs where such cost reductions can be implemented without adversely affecting safety.

To comply with Section 804 requirements, the FAA formed a collaborative workgroup with the National Air Traffic Controllers Association (NATCA) and the Professional Aviation Safety Specialists (PASS) labor unions. The workgroup developed a comprehensive process for facilities and service realignment analysis, and was chartered to conduct the analysis and to develop recommendations, taking the following factors into consideration:

- NextGen readiness of facilities
- Terminal Automation Modernization and Replacement (TAMR) program schedule
- Operational and airspace factors
- Existing facility conditions and workforce impacts
- Industry stakeholder input
- Costs and benefits associated with each potential realignment alternative
- Facilities and engineering planning and priorities
- Employee career development

Per statutory requirements, the realignment recommendations are developed in coordination with the FAA's Chief NextGen Officer and the Chief Operating Officer of the Air Traffic Organization (ATO), and are approved by the FAA Administrator.

Section 804 Collaborative Workgroup

The Section 804 collaborative workgroup developed the guiding principles and criteria for evaluating existing TRACON operations. The principles support the goals of developing operationally viable realignment and consolidation scenarios, capturing recommendations, and outlining next steps.

The workgroup has developed a repeatable and defensible four-step process to:

- Evaluate facility TRACON operations and prioritize for analysis
- Determine an initial set of realignment scenarios and a set of alternatives for each scenario
- Collect facility and operational data, and document system requirements
- Document facility, equipment, infrastructure, operational and safety data
- Capture qualitative workforce considerations, including training, transition, facility, and potential workforce impacts of potential realignments

- Consider potential impacts on operations, airspace modifications, route / fix changes, arrival / departure procedures, intra / inter-facility coordination, and pilot community interaction
- Collect and consider industry stakeholder input
- Quantify benefits and cost of potential realignments
- Develop a recommendation for each realignment scenario

Four-Step Process for Facilities Realignment Analysis

Each step of the process developed by the workgroup is outlined below:

Section 804 Four-Step Process Overview

The process serves as the platform for analyzing ATC facilities and services for potential realignments. To evaluate the realignment scenarios, the workgroup conducts working sessions at FAA headquarters, followed by site surveys at all facilities under analysis. At each facility the workgroup leadership facilitates sessions with facility management, labor representatives, and stakeholders. Stakeholders are briefed on the process, and meetings are held to answer questions and collect input.

The workgroup's technical and operational experts evaluate the airspace, equipment, facility, operational, and safety factors for each alternative in the analysis, and document the findings in Systems Analysis and Requirements Documents (SARDs), which serve as the basis for subsequent business case analysis. Workforce impact considerations, and future staffing and training requirements are captured, documented, and reviewed by the workgroup prior to making recommendations.

Throughout each step of the analysis, the workgroup interfaces with multiple FAA programs and organizations to fully inform its analysis and provide regular updates. The workgroup continually improves its processes by reviewing lessons learned from previous realignments, eliciting feedback from the facilities undergoing analysis, and refining working activities.

Realignment recommendations resulting from the four-step process are developed to:

- Maintain or improve operational safety and ensure service resilience

- Facilitate transition to NextGen
- Enable operational improvements
- Improve facility conditions
- Prioritize current and future investments
- Utilize agency assets more effectively
- Enhance controller proficiency
- Enhance career development and training opportunities

The workgroup operates in conjunction with the agency's NextGen deployment initiatives and schedules, and focuses on smaller TRACON facilities and operations. In the future, the process and analysis may be adapted to include the FAA's larger ATC facilities. However, at this time, the FAA does not have the necessary funds or planning capacity to consider these facilities for realignments or consolidations.

Report Scope

This report contains the details and results of analyzing 19 TRACON facilities. The majority of facilities included in this report were considered legacy sites – those sites were identified by the FAA to be realigned prior to enactment of Section 804 of the FAA Modernization and Reform Act of 2012 and workgroup establishment.

FAA Administrator's Recommendations

The following recommendations are contained in this report:

1. Realign Erie, PA (ERI) TRACON operations to Buffalo, NY (BUF) Tower / TRACON
2. Realign Akron-Canton, OH (CAK) and Mansfield, OH (MFD) TRACON operations to Cleveland, OH (CLE) Tower / TRACON
3. Realign Grand Rapids, MI (GRR), Lansing, MI (LAN), Muskegon, MI (MKG), Flint, MI (FNT), and Saginaw, MI (MBS) TRACON operations to Kalamazoo, MI (AZO) Tower / TRACON
4. Sustain and maintain Toledo, OH (TOL) TRACON operations at the current location
5. Sustain and maintain Youngstown, OH (YNG) TRACON operations at the current location

Details for each realignment scenario and recommendation are provided in the sections below.

Recommendation #1: Realign Erie (ERI) TRACON Operations to Buffalo (BUF)

The Section 804 workgroup evaluated ERI TRACON operations for realignment to BUF, CLE, or Pittsburgh (PIT) Tower / TRACON.

Background

ERI Tower / TRACON was constructed in 1957. The local airport authority owns the facility and leases it to the FAA. In 1987 the facility was converted from a TRACAB to a Tower / TRACON configuration. In 2004, the facility underwent a complete refurbishment. ERI is an ATC level 5 and the hours of operation are 0600-2400. ERI TRACON operations in CY 2014 were 33,929 annually.[1]

BUF Tower / TRACON was constructed in 1994. The FAA owns the facility. BUF is an ATC level 8 facility and it operates 24 hours a day. BUF is sufficiently sized to accommodate ERI TRACON operations. BUF TRACON operations in CY 2014 were 138,229 annually.

Approach

The workgroup conducted a working session at FAA headquarters, followed by stakeholder meetings and site surveys at ERI, CLE, BUF, and PIT.

During the evaluation, CLE and PIT were removed from further consideration because there were no operational synergies or other indicators supporting further analysis of realignment.

Some ERI stakeholders expressed concerns regarding the potential loss of local knowledge relating to interaction with Canadian ATC facilities and unique weather patterns, such as lake-effect snow, in the Erie area. Both ERI and BUF facilities have existing communications with Canadian ATC facilities and experience similar weather patterns.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends realigning ERI TRACON operations to BUF.

Pursuant to the statute, realignment to BUF could accelerate the transition to NextGen-enabling automation for ERI airspace. BUF is a NextGen-enabled facility built to current design and safety standards, with ample space and existing capacity to accommodate ERI operations. ERI and BUF have contiguous airspace. Both facilities acknowledged limited RADAR coverage in the Jamestown airspace that could be improved by realigning ERI operations to BUF and merging the airspace between the two facilities. With airspace redesign, operational benefits such as reductions in boundary coordination could improve the current airspace efficiency.

At the time of analysis, ERI was one of the five slowest TRACONs in the NAS. The low level of operations presents a challenge in training and certifying controllers at ERI TRACON.

BUF TRACON can accept ERI operations with minimal facility expansion or reconfiguration.

[1] FAA OpsNet was a source for all CY 2014 facility traffic counts quoted throughout this document.

Projected Costs and Savings

The ERI business case indicates that realignment of ERI TRACON operations to BUF provides a slightly negative return-on-investment, given the project lifecycle duration of 2015 to 2034, with the B/C ratio of 0.984, and an NPV of -$159.7K. A B/C ratio of 1 or above is considered positive. The costs and benefits were estimated conservatively: only 50% of the potential air traffic staffing efficiencies were taken into account and the resulting number was further risk-adjusted to the 80% confidence level, in accordance with FAA and OMB guidance. If calculated using 100% of expected staffing efficiencies, the B/C ratio would increase to 1.08 with a NPV of $788.5K.

The primary cost drivers were salary increases related to moving from the existing ATC level 5 (ERI) facility to an ATC level 8 (BUF) facility. Other key realignment costs included planning, site preparation/installation, controller and technician training and overtime, and Permanent Change of Station (PCS) compensation.

Savings include the avoidance of purchasing and refreshing a STARS system and scheduling efficiencies for both ERI and BUF personnel upon realignment.

	Mod-Sustain	Realign
Cost Summary (Risk Adjusted, Then-Year $K)		
Investment F&E Total	$3,582	$2,082
Indirect F&E Total	$134,698	$131,102
O&M Total	$474,850	$480,562
Economic Analysis Summary (Risk Adjusted, Present Value $K)		
Realignment Costs		$10,062
Cost Savings/Avoidance		$9,902
Net Present Value (NPV)		-$159.7
B/C Ratio		0.984

Business Case Summary for ERI

Recommendation # 2: Realign Akron-Canton (CAK) and Mansfield (MFD) TRACON Operations to Cleveland (CLE)

The workgroup evaluated CAK TRACON operations for realignment to PIT or CLE. Concurrently, the workgroup evaluated MFD TRACON operations for realignment to Columbus (CMH) Tower / TRACON or CLE Tower / TRACON.

Background

CAK Tower / TRACON was constructed in 1961. The FAA leases the CAK structure. In the event of CAK TRACON realignment to CLE, the agency would continue to lease portions of this space to operate the CAK Tower. CAK is an ATC level 7 facility, and it operates 24 hours a day for Tower and 0600-2400 for the TRACON. CAK TRACON operations in CY 2014 were 101,321 annually.

MFD Tower / TRACON was constructed in 1974. The FAA owns the facility. The MFD equipment room is at capacity for any future equipment that may be deployed. MFD is an ATC level 5 facility, and the hours of operation are 0600-2300. MFD TRACON operations in CY 2014 were 31,702 annually.

CMH Tower / TRACON was constructed in 2004. The FAA owns the facility. CMH is an ATC level 9 facility, and it operates 24 hours a day. CMH TRACON operations in CY 2014 were 322,744 annually.

PIT Tower / TRACON was constructed in 1985. The FAA owns the facility. PIT is an ATC level 9 facility, and it operates 24 hours a day. PIT TRACON operations in CY 2014 were 249,856 annually.

CLE is an ATC level 9 facility, and it operates 24 hours a day. The FAA owns the facility. CLE TRACON operations for CY 2014 were 198,463.

The FAA commissioned a new CLE Tower / TRACON in September 2015 with an overall cost of approximately $75M:

- The agency's investment into the new CLE Tower / TRACON is considered sunk cost and therefore was not accounted for in the current realignment business case, in accordance with standard accounting practices.
- The new CLE facility was designed and constructed to accommodate the realignments of TOL, MFD, CAK, and YNG TRACONs. This plan was developed before Section 804 of the FAA Modernization and Reform Act of 2012 was enacted.
- The new CLE Tower / TRACON is a state-of-the art facility with redundant engine generators, uninterruptible power supply (UPS) / power conditioning system (PCS), and environmental systems.

Approach

The workgroup conducted working sessions at FAA headquarters and in Columbus, OH, followed by stakeholder meetings and site surveys at CAK, MFD, CMH, PIT, and CLE.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and conducting analysis, the workgroup recommends realigning CAK and MFD TRACON operations to CLE.

The realignments support the transition to NextGen-enabling automation for the CAK and MFD airspace and enable 24-hour approach control service for CAK and MFD.

Future airspace redesign, which may be enabled by the realignment, is expected to result in operational benefits such as reductions in boundary coordination.

At the time of the analysis, MFD was one of the five slowest TRACONs in the NAS. The low level of operations there present a challenge in training and certifying controllers in the TRACON. Realignment to CLE may provide the relocated workforces with enhanced career progression opportunities, and create a more effective training environment through additional levels of complexity and higher traffic volume. The realignments will allow for the efficient use of the new CLE facility, which was designed and built to accommodate these facilities. Employees currently working in aging facilities will operate in a NextGen-enabled state-of-the-art facility that meets current standards and building codes.

While some CAK stakeholders expressed concern about the potential loss of local knowledge, other stakeholders favored the realignment as it would provide 24-hour-a-day approach control service.

Projected Costs and Savings

The CAK and MFD business case indicates that realignment to CLE provides a slightly negative return-on-investment, given the project lifecycle duration of 2015 to 2034, the benefit to cost (B/C) ratio of 0.95, and a negative NPV of just under $1M. The costs and benefits were estimated conservatively: only 50% of the potential air traffic staffing efficiencies were taken into account and the resulting number was then further risk-adjusted to the 80% confidence level, in accordance with FAA and OMB guidance. If calculated using 100% of expected staffing efficiencies, the B/C ratio would increase to 1.47 with a NPV of $8.2M.

The estimated cost of realigning CAK and MFD TRACON operations to CLE is $18.21M. The primary cost drivers were salary increases related to moving from the existing lower ATC level facilities (CAK, MFD) to an ATC level 9 (CLE) facility.

The estimated cost savings are approximately $17.24M. The CAK and MFD realignments will offer savings in equipment and technology refreshment over “mod-sustain” alternative, as well as controller salary savings through scheduling efficiencies. Additional salary savings are realized in the long term due to the lowered ATC level of CAK and MFD Towers.

	Mod-Sustain	Realign
Cost Summary (Risk Adjusted, Then-Year $K)		
Investment F&E Total	$9,156	$5,458
Indirect F&E Total	$356,595	$358,280
O&M Total	$1,052,632	$1,060,525
Economic Analysis Summary (Risk Adjusted, Present Value $K)		
Realignment Costs		$18,214
Cost Savings/Avoidance		$17,241
Net Present Value (NPV)		-$972.9
B/C Ratio		0.947

Business Case Summary for CAK and MFD

Recommendation #3: Realign Grand Rapids (GRR), Lansing (LAN), Muskegon (MKG), Flint (FNT) & Saginaw (MBS) TRACON Operations to Kalamazoo (AZO)

The workgroup evaluated the following realignment scenarios:

- GRR TRACON operations for potential realignment to AZO or South Bend (SBN)
- MKG TRACON operations for potential realignment to AZO, SBN, or Milwaukee (MKE)
- FNT TRACON operations for potential realignment to AZO or Detroit (D21)
- LAN TRACON operations for potential realignment to AZO or D21
- MBS TRACON operations for potential realignment to AZO or D21
- Fort Wayne (FWA) TRACON operations for potential realignment to AZO or SBN

Background

GRR Tower / TRACON was constructed in 1963. The FAA owns the facility. GRR is an ATC level 7 facility, and its hours of operation are 0530-2400. GRR TRACON operations for CY 2014 were 97,884.

MKG Tower was commissioned in 1967, originally in a TRACAB configuration. The TRACON was commissioned in 1979 with the addition of a base building. The FAA owns the facility. MKG is an ATC level 5 facility, and its hours of operation are 0600-2300. MKG TRACON operations for CY 2014 were 47,376.

MBS Tower / TRACON was constructed in 1966. The FAA owns the facility. MBS is an ATC level 5 facility, and its hours of operation are 0600-2300. MBS TRACON operations for CY 2014 were 43,598.

FNT Tower / TRACON was constructed in 1997. The FAA owns the facility. FNT is an ATC level 5 facility, and its hours of operation are 0545-2330. FNT TRACON operations for CY 2014 were 51,298.

LAN Tower / TRACON was constructed in 1958. The FAA owns the facility. LAN is an ATC level 6 facility, and it operates 24 hours a day. LAN TRACON operations for CY 2014 were 80,721.

AZO Tower / TRACON was commissioned in 2014. The FAA owns the facility. AZO is an ATC level 6 facility, and its hours of operation are 0600-2300. AZO TRACON operations for CY 2014 were 72,133.

The AZO TRACON was designed to accommodate additional TRACON positions. The overall cost of the facility was approximately $28M:

- The agency's investment into the AZO Tower / TRACON is considered sunk cost and therefore was not accounted for in the current realignment business cases, in accordance with standard accounting practices.

- The AZO Tower / TRACON facility was designed and constructed to accommodate the realignments of GRR, MKG, and LAN TRACON operations. This plan was developed before Section 804 of the FAA Modernization and Reform Act of 2012 was enacted.
- The new AZO Tower / TRACON is a state-of-the art facility with redundant engine generators, UPS / PCS, and environmental systems.

Approach

The workgroup conducted working sessions at FAA headquarters and field sessions in Saginaw and Flint, MI, followed by stakeholder meetings and site surveys at MBS, FNT, LAN, MKG, GRR, FWA, D21, MKE, SBN, and AZO.

The initial scope of the analysis included GRR, MKG, LAN, and FWA. Based on facility input during the working sessions and site surveys, the workgroup determined that inclusion of MBS and FNT would provide a more comprehensive analysis of the facilities in the region.

FWA, D21, SBN, and MKE were removed from further consideration during the evaluation process due to lack of operational synergies or other indicators supporting further realignment analysis.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and conducting analysis, the workgroup recommends realigning GRR, MKG, MBS, FNT, and LAN TRACON operations to AZO Tower / TRACON.

The realignments support the transition to NextGen-enabling automation for the GRR, MKG, MBS, FNT, and LAN airspace. The realignment will enable 24-hour approach control service for GRR, MKG, MBS, and FNT. LAN currently has 24-hour approach control service.

Future airspace redesign, which may be enabled by the realignment, is expected to result in operational benefits such as reductions in boundary coordination.

At the time of analysis, MKG and MBS were some of the slowest TRACONs in the NAS. The low level of operations in those facilities presents a challenge in training and certifying controllers in the TRACON. The opportunity to train and develop controllers at mid-level facilities should help to prepare certified candidates for busier facilities. The realignments are expected to enhance controller career progression opportunities, and will allow the new AZO TRACON facility to be used more efficiently. Upon realigning TRACON operations to AZO, employees will operate in a NextGen-enabled state-of-the-art facility that meets current standards and building codes.

Projected Costs and Savings

The GRR, MKG, MBS, FNT, and LAN business case indicates that realignment of TRACON operations from those facilities to AZO provides a positive return-on-investment, given the project lifecycle duration of 2015 to 2034, with a positive benefit to cost (B/C) ratio of 1.055, and an NPV of $3.6M. The costs and benefits were estimated conservatively: only 50% of the potential air traffic staffing efficiencies were taken into account and the resulting number was then further risk-adjusted to the 80% confidence level, in accordance with FAA and OMB guidance.

The primary costs are implementation planning, telecommunications, transition, training, overtime, staff relocation costs, and additional staffing costs due to facility level upgrades.

Primary savings are in staffing scheduling efficiencies and the Prime Mission Equipment (PME) cost avoidance of purchasing and refreshing STARS at GRR, MKG, MBS, FNT, and LAN.

	Mod-Sustain	Realign
Cost Summary (Risk Adjusted, Then-Year $K)		
Investment F&E Total	$15,218	$9,413
Indirect F&E Total	$328,740	$310,956
O&M Total	$753,357	$774,191
Economic Analysis Summary (Risk Adjusted, Present Value $K)		
Realignment Costs		$65,417
Cost Savings/Avoidance		$69,002
Net Present Value (NPV)		$3,584.7
B/C Ratio		1.055

Business Case Summary for GRR, MKG, MBS, FNT and LAN

Recommendation #4: Sustain and Maintain TRACON Operations at Toledo (TOL)

The workgroup evaluated TOL TRACON operations for realignment to CLE, D21, or AZO.

Background

The TOL facility was constructed in 1967. The structure is leased from the Toledo Airport Authority, and operated and maintained by the FAA. The facility is in need of modernization. The equipment room is at capacity for any future equipment that may be deployed. TOL is an ATC level 6 facility, and it operates 24 hours a day. TOL TRACON operations for CY 2014 were 83,129.

D21 was commissioned in 1992. The FAA owns the facility. D21 is an ATC level 11 facility, and it operates 24 hours a day. D21 TRACON operations for CY 2014 were 522,752.

Approach

To analyze the scenario, the workgroup conducted a working session at FAA headquarters, followed by site surveys and stakeholder meetings at TOL, CLE, D21, and AZO. Two realignment alternatives (TOL to CLE and TOL to AZO) were eliminated due to the lack of operational advantages or expected cost savings of realigning to those sites.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and conducting analysis, the workgroup recommends sustaining and maintaining TOL TRACON operations at the current location.

Airspace operations between D21 and TOL are closely aligned, and improvement in air traffic flows could possibly result from realignment.

While realignment to D21 would support the transition to NextGen-enabling automation for TOL airspace, the estimated increase in lifecycle costs result in a significantly negative return-on-investment.

Projected Costs and Savings

The TOL to D21 business case indicates that realignment of TRACON operations to D21 does not provide a positive return-on-investment, given the project lifecycle duration of 2015 to 2034 and a negative benefit to cost (B/C) ratio of 0.6, and an NPV of negative $8.97M. The costs and benefits were estimated conservatively: only 50% of the potential air traffic staffing efficiencies were taken into account and the resulting number was then further risk-adjusted to the 80% confidence level, in accordance with FAA and OMB guidance.

Primary cost drivers are controller salary increases associated with moving from an existing ATC level 6 (TOL) to an ATC level 11 (D21) facility, as well as STARS equipment acquisition at D21, facility modification at D21, and transition, training, overtime, and PCS costs.

These costs are greater than the savings and the cost avoidance of STARS procurement and facility modernization at TOL.

Due to the significant negative return-on-investment, the workgroup does not recommend this realignment, despite potential operational benefits.

	Mod-Sustain	Realign
Cost Summary (Risk Adjusted, Then-Year $K)		
Investment F&E Total	$3,764	$5,348
Indirect F&E Total	$383,299	$382,941
O&M Total	$1,098,790	$1,110,296
Economic Analysis Summary (Risk Adjusted, Present Value $K)		
Realignment Costs		$22,847
Cost Savings/Avoidance		$13,879
Net Present Value (NPV)		-$8,968.0
B/C Ratio		0.607

Business Case Summary for TOL

Recommendation #5: Sustain and Maintain TRACON Operations at Youngstown (YNG)

The Section 804 workgroup evaluated YNG TRACON operations for potential realignment to PIT or CLE.

Background

YNG Tower / TRACON was constructed in 1970. The FAA owns the facility. YNG is an ATC level 5 facility, and it operates 24 hours a day at the Tower and 0600-2400 at the TRACON. YNG TRACON operations for CY 2014 were 44,416.

PIT Tower / TRACON was constructed in 1985. The FAA owns the facility. PIT is an ATC level 9 facility, and it operates 24 hours a day. PIT TRACON operations for CY 2014 were 249,856 annually.

CLE Tower / TRACON is an ATC level 9 facility, and it operates 24 hours a day. The FAA owns the facility. CLE TRACON operations for CY 2014 were 198,463.

The FAA commissioned a new CLE Tower / TRACON in September 2015 with an overall cost of approximately $75M:

- The agency's investment into the new CLE Tower / TRACON is considered sunk cost and therefore was not accounted for in the current realignment business case, in accordance with standard accounting practices.
- The new CLE facility was designed and constructed to accommodate the realignments of TOL, MFD, CAK, and YNG TRACONs. This plan was developed before Section 804 of the FAA Modernization and Reform Act of 2012 was enacted.
- The new CLE Tower / TRACON is a state-of-the art facility with redundant engine generators, UPS / PCS, and environmental systems.

Approach

The workgroup conducted working sessions at FAA headquarters, followed by stakeholder meetings and site surveys in YNG, PIT, and CLE.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and conducting analysis, the workgroup recommends sustaining and maintaining YNG TRACON operations at the current location.

The recommendation is made because of the significant costs associated with potential realignment and lack of operational efficiencies between YNG and either PIT or CLE.

Projected Costs and Savings

The workgroup investigated multiple YNG realignment alternatives, however the resulting business cases were not favorable. The business case analysis for YNG indicates realignment of TRACON operations to either CLE or PIT would not provide a positive return on investment in any realignment alternative, given the project lifecycle duration of 2015 to 2034. The realignment of YNG to PIT was the least negative alternative with a BC ratio of 0.7, and a NPV of negative $3M.

The costs and benefits were estimated conservatively: only 50% of the potential air traffic staffing efficiencies were taken into account and the resulting number was then further risk-adjusted to the 80% confidence level, in accordance with FAA and OMB guidance.

Primary cost drivers were staffing costs, with a significant increase in air traffic controller salaries associated with moving from ATC level 5 facility (YNG) to ATC level 9 (PIT) facility.

Primary cost savings were the cost avoidance of purchasing and refreshing STARS equipment at YNG. However, the costs were far greater than the cost avoidance or savings offered by realignment.

Due to the significant negative return-on-investment of any YNG scenarios, the workgroup does not recommend this realignment, despite potential operational benefits.

	Mod-Sustain	Realign
Cost Summary (Risk Adjusted, Then-Year $K)		
Investment F&E Total	$2,890	$2,085
Indirect F&E Total	$304,109	$308,274
O&M Total	$883,533	$891,903
Economic Analysis Summary (Risk Adjusted, Present Value $K)		
Realignment Costs		$10,344
Cost Savings/Avoidance		$7,348
Net Present Value (NPV)		-$2,995.5
B/C Ratio		0.710

Business Case Summary for YNG

Proposed Timing for Implementation of Recommendations

The implementation of facility and operational realignments and staff moves are subject to current labor and FAA collective bargaining agreements, which require a 12 month notification to the workforce as well as other FAA policies, and regulations. The FAA currently plans to notify the workforce of the recommendations in 2016, initiate project implementation in 2017, and conduct the cutovers in 2018. Implementation of each realignment is contingent on funding and resource availability.

Conclusion

The realignment recommendations outlined in this report are the result of a collaborative process that involved a multi-disciplinary workgroup of representatives from FAA management, labor, field facilities, finance, and subject matter experts.

The repeatable and defensible process developed by the workgroup serves as a stable foundation for realignment analyses and recommendations that will be developed in the future. The process will be used to maximize operational, administrative, and maintenance efficiencies, support transition to NextGen, and deliver the highest value to stakeholders.

Through continuous analysis and assessment of facilities through this process, the FAA supports its goal of ensuring safe and secure operations across the nation.

The FAA's success in conducting realignment analysis, continuing to develop realignment recommendations, and implementing those realignments is contingent upon stable multi-year funding, continued collaboration with labor unions, and coordination with industry stakeholders.

Federal Register Publication

Following the process outlined in Section 804 of the FAA Modernization and Reform Act of 2012, the FAA plans to submit the National Facilities Realignment and Consolidation Report, Part 2 to Congress and publish it in the Federal Register for public review and comment. This report will be available for review on the Federal Register docket and the FAA website.

After the 45-day public comment period and the 60-day comment review period, the FAA plans to submit the final report to Congress, with collected public comments.