2023 Edition

STRATEGIC RAIL CORRIDOR NETWORK

(STRACNET)

&

DEFENSE CONNECTOR LINES

RAILROADS FOR NATIONAL DEFENSE

This Page Intentionally Left Blank

TABLE OF CONTENTS

LIST OF NOTABLE ILLUSTRATIONS

Figure **Page**

LIST OF TABLES

Table **Page**

I. EXECUTIVE SUMMARY

SCOPE

This study was undertaken to update the 2018 designation of the Strategic Rail Corridor Network (STRACNET) and its associated connector lines. The STRACNET has been updated on a 5-year basis since 1993, which has been sufficient to keep pace with rail network changes since that time. Together, STRACNET and the connectors are the civil rail lines most important to national defense. The study also verifies their defense readiness condition, and documents defense rail line requirements. The STRACNET has been relatively stable since 2018. The most significant changes to the STRACNET since 2018 have been the inclusion of more loading sites that are used for rail transport of some Army National Guard (ARNG) units. In some cases, this has led to the designation of additional connector lines.

CONCLUSIONS

The Military Surface Deployment and Distribution Command[1] Transportation Engineering Agency and the Federal Railroad Administration (FRA) reviewed and updated the designation of civil rail lines important to national defense. Virtually all lines designated for STRACNET and connectors to military installations and activities (such as Strategic Seaports) requiring rail service meet defense readiness requirements for maintenance condition, clearance, and gross weight capability. State maps in Appendix A show these lines. Department of Defense (DOD) installations and activities requiring rail service to accomplish their assigned mission are listed in Appendix B.

[1] The Military Surface Deployment and Distribution Command (SDDC) was named the Military Traffic Management Command (MTMC) before January 1, 2004. Since 1988 MTMC/SDDC has been the Army component of U.S. Transportation Command (USTRANSCOM).

Inquiries about installations, requirements, and STRACNET designations should be addressed to:

Mail Address	**Headquarters** **Military Surface Deployment and Distribution Command** **ATTN: Transportation Engineering Agency (SDTE-SA)** **1 Soldier Way** **Scott AFB, IL 62225-5006**
Telephone	**DSN: 322-817-8512** **Commercial: (618) 817-8512**
Email	**usarmy.scott.sddc.mbx.tea-rnd@mail.mil**

Inquiries about the US Department of Transportation North American Rail Network (NARN) geodatabase should be addressed to:

Mail Address	**Federal Railroad Administration** **ATTN: RPD-20** **1200 New Jersey Ave. SE Stop 15** **Washington, DC 20590**
Telephone	**Commercial: (202) 493-6415**

II. PURPOSE AND METHODOLOGY

PURPOSE

The overall purpose of this study and resulting report is to establish and then clearly communicate DOD's domestic civil railroad infrastructure requirements to entities that provide, maintain, or regulate railroad infrastructure. Those organizations include railroad regulatory agencies, government rail planners at the federal, state, and local level, passenger rail carriers, and freight rail carriers. This publication accomplishes this purpose by providing information in three main categories.

First, this publication designates specific civil rail lines that form the Strategic Rail Corridor Network (STRACNET) and defense connector lines. Defense connector lines are designated to complete the network between STRACNET and defense installations or other activities requiring rail service. Together, STRACNET and connector lines are the civil railroad lines most important to national defense. It updates the civil rail lines designated to satisfy defense requirements and confirms that these lines meet minimum defense readiness conditions. However, STRACNET is not a routing guide, and actual shipments may not necessarily travel over STRACNET lines. Rail lines that are not designated as STRACNET or connector lines are also beneficial to national defense if they have adequate clearance and could be used as a detour route if a service interruption occurred on STRACNET.

Second, this publication presents the current list of defense installations and activities requiring rail service to accomplish the assigned mission. This list is the foundation for the update of civil rail lines important to national defense as it establishes the relevant origins and destinations on the network.

Lastly, this publication describes the methodology and analysis undertaken to evaluate STRACNET against defense requirements.

METHODOLOGY

The Military Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA) and the Federal Railroad Administration (FRA) jointly reviewed the lines for the STRACNET and connectors between STRACNET and defense installations and activities requiring rail service. Based on SDDCTEA's request, the DOD Components and relevant Support Agencies (Army, Navy, Air Force, Marine Corps, Space Force, National Guard Bureau, Defense Contract Management Agency, and Defense Logistics Agency) updated the list of military installations and activities requiring rail service. SDDCTEA screened the final list for DOD.

Traffic density is a good indicator of rail line viability. The rail lines[2] designated as STRACNET have moderate to high traffic density. Traffic density on Class 1 railroads was obtained from the railroads through the Association of American Railroads. Traffic density on Class 2 and Class 3 carriers is estimated based on FRA's railroad crossing database and questionnaires to certain short line carriers.

The analysis also included a review to ensure that the designated lines meet defense readiness requirements for maintenance condition, clearance for oversize shipments, and weight-bearing capacity. The FRA continuously monitors carrier's safety maintenance inspection compliance to generally achieve coverage of most of STRACNET and defense connector lines every 3 years as part of its overall inspection program.

The DOD clearance profile used to analyze rail line clearances was developed and presented in the MTMC "STRACNET Condition Report," dated June 1981[3]. In successive updates, including this publication, SDDCTEA verified that the DOD clearance profile continues to accommodate the vast majority of military equipment.

Finally, the analysis evaluated the weight-bearing capacity of defense lines to support military traffic. The heaviest common military railcar-loading configuration creates a lower axle load than what is required by industry standards for railroad track in North America. Therefore, all designated defense lines in the United States meet military needs for moving heavy military cargo.

[2] Designated defense lines were also identified in MTMC reports *Rail Lines Important to National Defense*, MTMC, July 1983, *Civil Rail Lines Important to National Defense*, MTMC, July 1986, October 1990, and December 1993, and *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*, SDDCTEA, December 1998, September 2003, March 2008, October 2013, and October 2018.

[3] *STRACNET Condition Report, A Study of Rail Lines Important to National Defense for the Armed Services Committees of Congress*, MTMC, June 1981.

III. INTRODUCTION AND BACKGROUND

During the 1970s, the railroads experienced a period of economic instability. Ten railroads declared bankruptcy and deferred maintenance was commonplace. The DOD experienced excessive shipping times, and concern increased over the civil railroad industry's capability to support a defense emergency. Therefore, in June 1975, the Deputy Secretary of Defense directed the Commander, MTMC to establish and develop the Railroads for National Defense (RND) Program in coordination with the Department of Transportation's FRA.[4]

The purpose of the RND Program is to identify defense rail requirements; assure consideration for national defense in civil railroad policy, plans, standards, and programs; and gain support and responsiveness for defense rail line requirements.

The US Army's MTMC initiated the RND Program with the development of STRACNET in 1976.[5] STRACNET is a 33,000-mile interconnected network of rail corridors (not actual rail lines) important to national defense (Figure 1). It was developed from analyses of mobilization/deployment needs, peacetime traffic, and combat tank shipments as an indicator of oversize/overweight movements. FRA designated a main line to satisfy each STRACNET corridor.[6]

In 1977, a list of DOD installations and activities requiring rail service was published[7]. The list has been updated in the STRACNET reports since then. Overall, fewer installations require rail service today than in 1977. In some instances, STRACNET corridors were no longer required and STRACNET was updated accordingly. For example, the rail corridor to Maine was originally part of STRACNET. It was removed from STRACNET in the 1998 update following the closure of Loring Air Force Base in northern Maine.

The DOD clearance profile was developed to reflect rail line clearance needs for oversized equipment. The DOD profile is used by SDDC to analyze rail line clearances and validate the clearance of lines designated for national defense. It is also used when developing new weapon systems so that they will fit on the rail lines.

---

[4] Letter, Deputy Secretary of Defense to the Secretary of Transportation, 25 June 1975.

[5] Report, RND 76- 1, *An Analysis of a Strategic Rail Corridor Network (STRACNET) for National Defense*, MTMC, November 1976.

[6] *Final Standards, Classification, and Designation of lines of Class I Railroads in the United States*, Secretary of Transportation's report to Congress, dated 30 June 1977, submitted in accordance with Section 503(e) of the "Railroad Revitalization and Regulatory Reform Act of 1976" (Public Law 94-210).

[7] *List of Department of Defense Installations and Activities Requiring Rail Service*, MTMC, 1977.
Designated defense lines were also identified in MTMC reports Rail Lines Important to National Defense, MTMC, July 1983, Civil Rail Lines Important to National Defense, MTMC, July 1986, October 1990, and December 1993, and Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines, SDDCTEA, December 1998, September 2003, March 2008, October 2013, and October 2018.

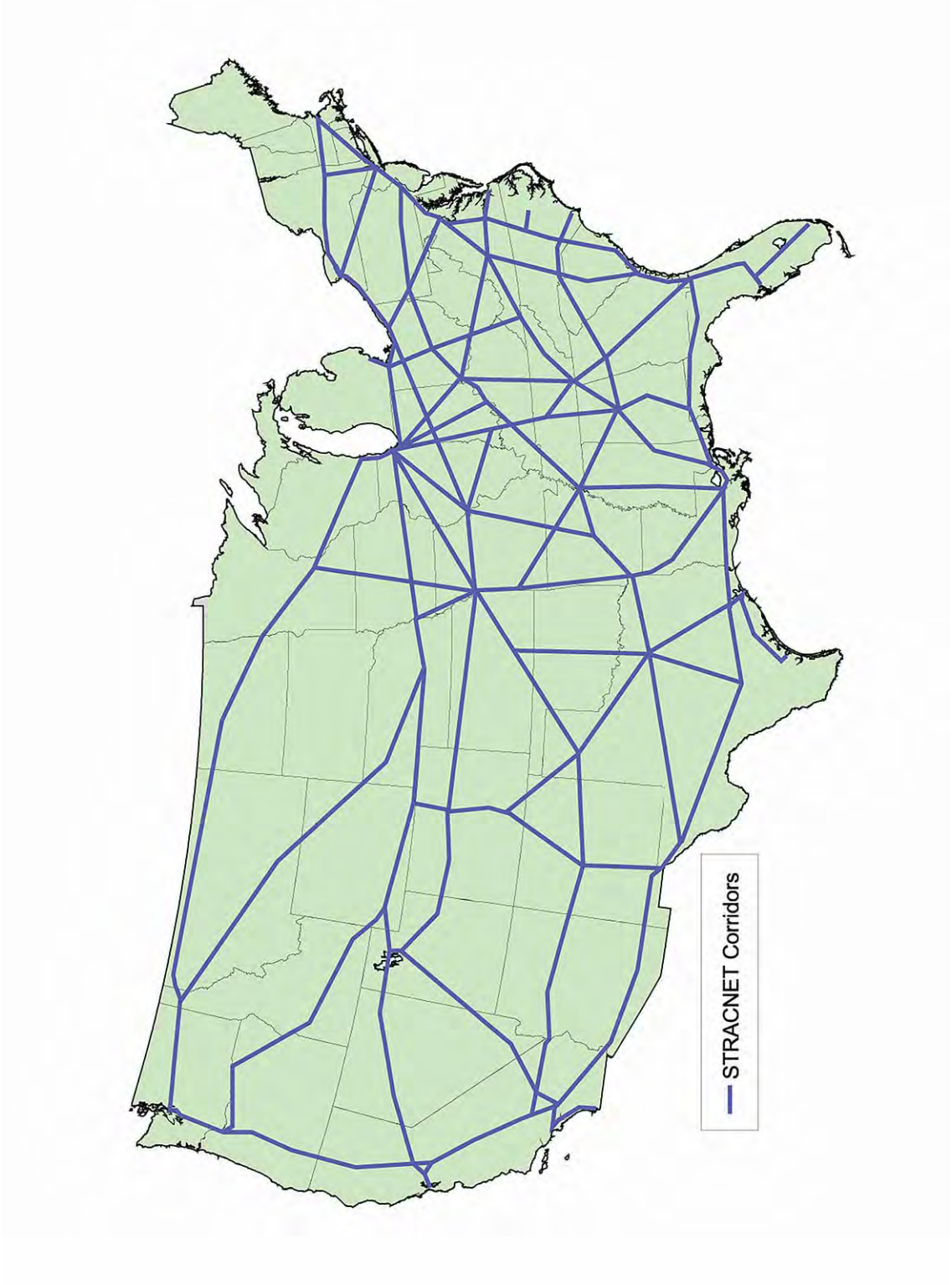


Figure 1. Strategic Rail Corridor Network (STRACNET)

By mandate from the US Congress, the condition of defense lines was reported in the STRACNET Condition Report (1981). Connector lines from STRACNET to defense installations and activities requiring rail service were identified. The maintenance condition of defense lines was found to be satisfactory. The report also found that defense shipments are not restricted to designated lines, because of clearance requirements, and in most cases can move by alternate routes. Thus, rail lines in addition to STRACNET and the connector lines are beneficial to national defense.

In 1982, the FRA and MTMC agreed to perform periodic reviews of rail lines important to national defense.[8] Such reviews resulted in the publications: *Rail Lines Important to National Defense*, 1983, *Civil Rail Lines Important to National Defense*, 1986, 1990, and 1993 and *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*, 1998, 2003, 2008, 2013, and 2018. Since 1993, the STRACNET has been updated on a 5-year cycle.

This 2023 report updates the designation of STRACNET and connector lines which are the railroad lines most important to national defense. STRACNET allows defense and civil rail planning to be more easily coordinated. STRACNET also allows for prioritization of restoration of rail service in the event of any emergency that causes large-scale loss of rail lines. By using high-density lines to satisfy most of STRACNET, the risk of a civil rail line abandonment affecting national defense is minimized. The RND Program focuses most of its efforts on protecting STRACNET and connector lines from being abandoned, downgraded, or having their ability to handle oversize loads impeded.

This report is not intended to be a routing guide for traffic managers. Rail carriers will route traffic using many different parameters relative to profit, distance, clearance, and time. In many instances, defense rail shipments will move on other rail lines not designated as part of STRACNET.

The capability of rail carriers to perform this type of routing is enabled by the built-in redundancy of rail lines which form a very robust network. During times of floods, hurricanes, attacks, or earthquakes redundant capability is very useful, but over time it can be very expensive.

The railroad industry must operate enough track to move traffic efficiently but not so much that the revenue generated is inadequate to support good maintenance. In the past, too many miles of track were being maintained with too few revenue dollars. This situation resulted in several railroad bankruptcies and many miles of deteriorated railroad track. Deregulation of the railroad industry in 1980 enabled the railroads to abandon unprofitable lines more easily.

[8] Letters, Cdr, MTMC, to Federal Railroad Administrator, 2 April 1982, and Mr. James C. Rooney, Associate Administrator for Policy to the Special Assistant for Transportation Engineering, MTMC, 5 October 1982.

Railroad mergers sometimes resulted in most traffic on a corridor being concentrated on a single line, with parallel lines either being abandoned or downgraded to serve only local traffic. These reductions in trackage permitted the railroads to focus their maintenance dollars where they were needed most, with the result that most track is now well-maintained.

In the 2020s the rail carriers have reduced the amount of track they are seeking to abandon, and are working to increase capacity on some rail lines. The rail industry understands if network improvements will help transport more cargo, line upgrades may be a worthwhile investment. Civil-sector (commercial and non-defense governmental) public-private partnerships and favorable tax consideration and/or grants for railroad infrastructure investments may help to further improve railroad infrastructure and capacity.

The RND Program monitors the rail network for abandonments affecting STRACNET or connectors and track improvements to downgraded or abandoned lines. These improvements provide for a robust rail network that earns the capital required to provide good maintenance and support to national defense. While the pace of abandonments has slowed since the 1980s, it is important to ensure that none of the abandonments that do occur adversely affect National Defense.

IV. ANALYSIS

1. DESIGNATION OF DEFENSE RAIL LINES

Traffic volume is a good indicator of rail line viability. Higher traffic densities also correlate well with good maintenance conditions. If traffic volumes have changed within defense rail corridors, civil rail lines with higher densities may exist that could replace lines previously designated for those corridors. Therefore, SDDCTEA and the FRA conducted a review and analysis of defense rail corridors based on updated traffic densities.

The FRA obtained the latest available (2020) traffic densities from Class 1 rail carriers. Those lines that had a significant decrease in traffic density, particularly those which, on an annual basis, had dropped below 10 million gross tons (MGT) since the last DOD-FRA analysis (2018), were reviewed by FRA to determine if there were more desirable routes available with higher traffic density. SDDCTEA and FRA agreed upon the final designation of STRACNET lines (35,000 miles) and connector lines (6,300 miles), which are shown in Figure 2 and identified in detail on the State maps in Appendix A. Military installations and activities requiring rail service are listed in Appendix B. FRA continuously updates the North American Rail Network (NARN) geodatabase with rail line abandonments, carrier changes, and other data. SDDCTEA used the FRA NARN database to produce a map of each State.[9]

[9] No map is included for Hawaii since it has no freight railroads.

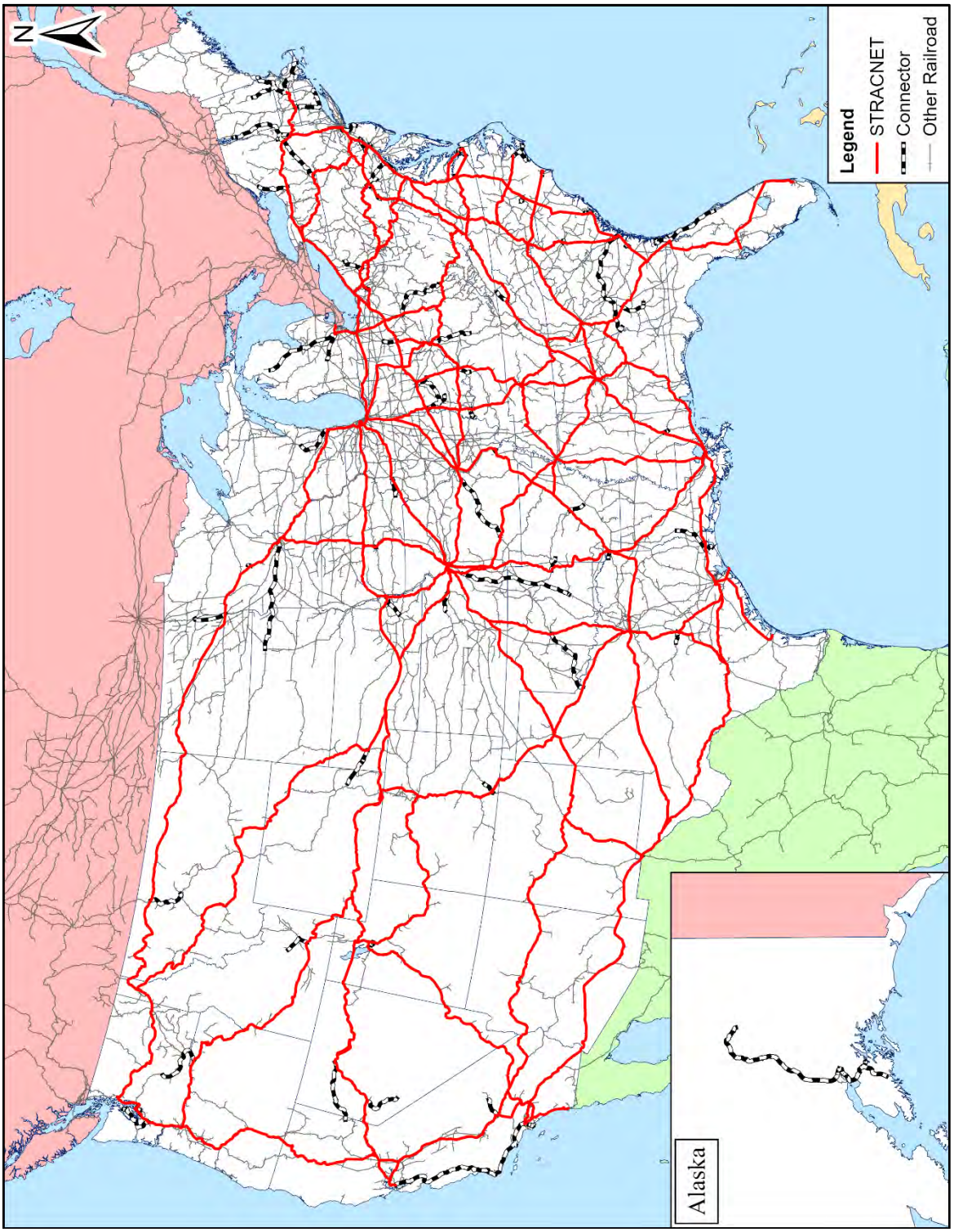


Figure 2. Civil Rail Lines Most Important to National Defense

2. MAINTENANCE CONDITION AND OPERATING SPEED

Maintenance condition of STRACNET is very important to national defense. The allowable operating speed limit over a rail line is directly related to the maintenance condition of the line; that is, the higher the FRA track safety-maintenance classification then the higher the allowable operating speed.[10] Defense planners use an average speed of 22 miles per hour[11] to calculate travel times for military equipment transported by unit trains. Allowing for expected delays, speeds of 40 miles per hour for most of the journey are desirable to allow an average speed of at least 22 miles per hour.

Table 1 shows measures of civil rail line defense readiness condition. Lower speeds are more acceptable on connector lines than on STRACNET lines because connector lines are usually used for only a small portion of the total trip length. Also, many railroads maintain main lines and operate trains at higher standards and speeds than shown in Table 1. High maintenance standards result in increased reliability and safety.

The FRA monitors carriers' inspection compliance to achieve periodic coverage of all STRACNET and connector rail lines. SDDCTEA's review of the FRA track inspection results indicates broad compliance with the measures of acceptable defense readiness conditions.

The railroads have significantly increased capital expenditures on the Nation's railroad track and structures since the mid-1970s. These expenditures, combined with the 1980 passage of the Stagger's Act, which partially deregulated the railroad industry, resulted in track conditions improving significantly. The decrease in track-related accidents is impressive. The FRA data shows that there were over 4,000 accidents attributable to track defects each year in 1977, 1978, and 1979. This has declined to less than 1,000 accidents attributable to track defects per year since 2008. The decline in track-related accidents is another indicator confirming defense readiness conditions.

The FRA inspection of designated defense rail lines reveals that, at the time of FRA's inspection, the carriers generally maintained their lines in defense readiness condition.

TABLE 1
MEASURES OF CIVIL RAIL LINE DEFENSE READINESS CONDITION

	Acceptable	Desirable
STRACNET		
FRA Track Class	2	≥ 3
Freight Train Speed (Maximum)	25 mph	≥ 40 mph
CONNECTORS		
FRA Track Class	1	≥ 2
Freight Train Speed (Maximum)	10 mph	≥ 25 mph

[10] *Federal Railroad Administration Track Safely Standards*, 49 CFR 213.9, *Class of Track: Operating speed limits.*
[11] SDDCTEA Pamphlet 700-2, *Logistics Handbook for Strategic Mobility Planning, October 2011*, page 33.

3. LOW TRAFFIC DENSITY CONNECTOR LINES

Low traffic density branchline connectors are those where the total civil and defense rail traffic is less than 3 MGT per year. Low-density lines are likely to have lower speed limits and maintenance levels than high-density lines, as well as being at a greater potential risk of abandonment. The DOD identified 141 installations and activities that require rail service to complete the assigned mission (Appendix B). Of the 141 installations and activities requiring rail service, 49 are on STRACNET main lines, 46 are on connectors with traffic densities greater than or equal to 3 MGT per year, and 46 are on low traffic density branch lines (Table 2). The 46 installations and activities served by these low traffic density branch lines are identified by Service in Appendix C.

In a few cases, a low-density line has little risk of abandonment because it sees passenger trains as well as freight trains. For example, passenger trains between Chicago and Los Angeles operate via the Army's Piñon Canyon Maneuver Site (PCMS) over a STRACNET connector line in southeastern Colorado that sees very little freight traffic. As long as these passenger trains operate on their current route, the rail route to PCMS will be very well-maintained and not likely at risk of abandonment.

TABLE 2
DOD INSTALLATIONS AND ACTIVITIES REQUIRING RAIL SERVICE

Served by:	Army	Navy	Marines	Air Force	DCMA	DLA	Total
STRACNET	40	1	4	2	0	2	49
CONNECTORS							
Traffic Volumes Greater than or Equal to 3 MGT/YR*	38	4	0	2	1	1	46
Less than 3 MGT/YR	25	13	4	2	2	0	46
TOTAL	103	18	8	6	3	3	141
*MGT/YR – Million gross tons per year							

4. CLEARANCES

Rail line clearances can be critical for transporting military cargo. Military equipment can overhang railcars and extend past the standard width of 10 feet 8 inches set by the Association of American Railroads (AAR) Plate C. Trackside obstructions and structural limitations (for example, bridges (Figure 3), tunnels, high-level station platforms) determine the size of shipments that can be moved. The STRACNET Condition Report, June 1981, explained how MTMC developed the DOD clearance profile (Figure 4) to analyze rail line clearances and determined that almost all STRACNET lines passed the profile.

In some cases, published clearance information[12] indicates that a STRACNET line meets the DOD profile requirements. In other cases, the commercial railroads indicated that the DOD profile would clear a line, subject to special handling, even though the DOD profile exceeded the published clearances for the route. In addition, several commercial railroads have expanded clearances on their routes since 1981.

Figure 3. Plate Girder Bridge

[12] Railway Line Clearances, Volume 202, 1992/93 Annual Issue, K-III Information Company, New York, NY; and The Official Railway Guide - Fourth Quarter 2019, JOC Group Inc., New York, NY

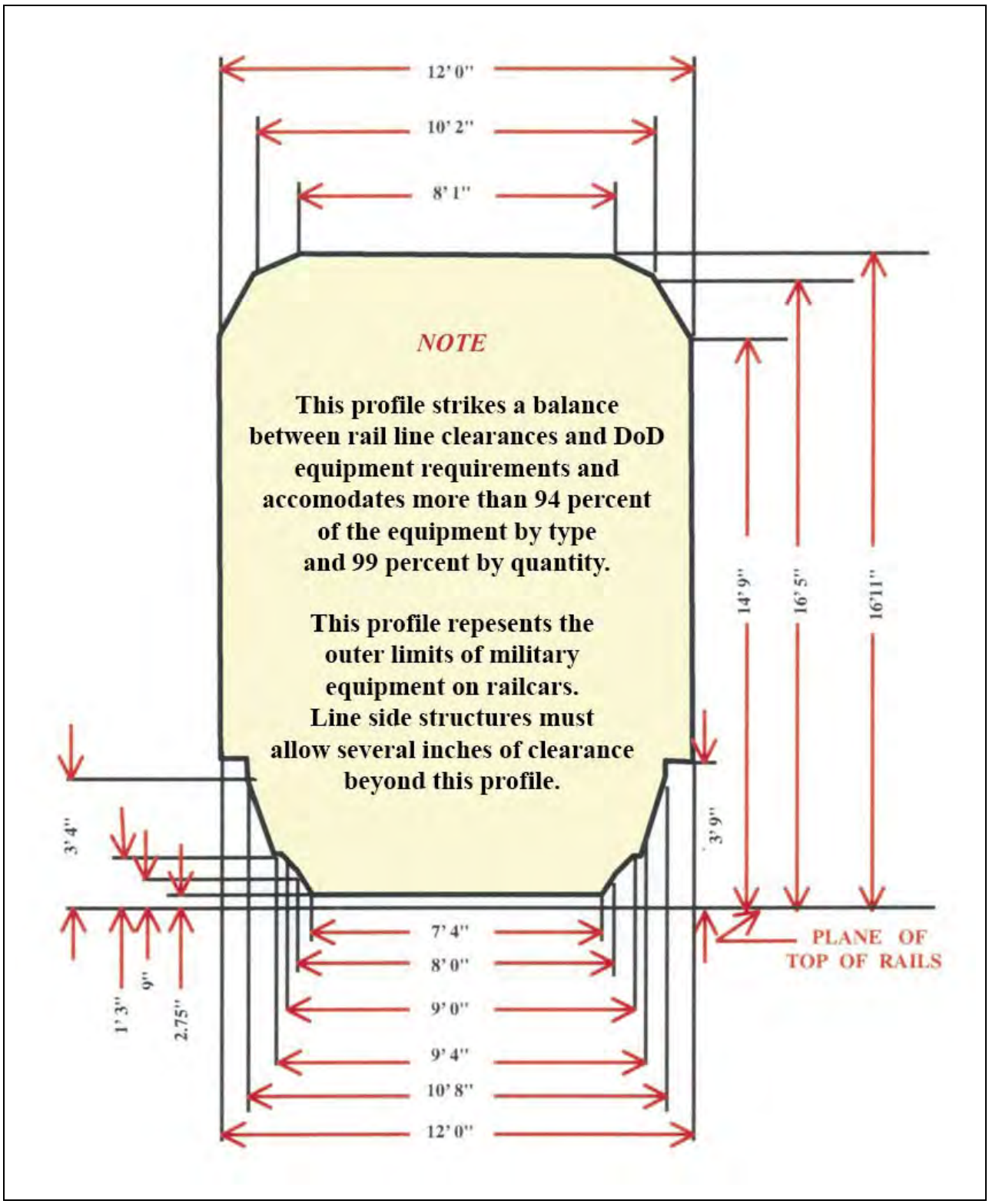


Figure 4. Clearance Profile – Department of Defense

SDDCTEA reviews rail clearances for STRACNET defense lines because clearance dimensions can change. The primary points of contact regarding rail line clearances are the clearance departments of owning railroads and the American Railway Engineering and Maintenance-of-Way Association (AREMA). SDDCTEA works closely with them to ensure that defense lines can accommodate the DOD profile. In general, railroad construction projects will result in improved clearances. If a railroad rebuilds a bridge or tunnel or other substantial structure, it will almost always rebuild it in a way that enhances clearances. The AREMA standards for most new structures require clearances that are substantially more generous than those required by the DOD clearance profile.

High-level platforms in passenger stations are the only type of new construction that is likely to interfere with the DOD profile. High-level platforms can prevent a rail line from being used to deploy M-1 Abrams tanks and other important military items as well as various oversize civilian freight shipments. If high-level platforms are installed on STRACNET lines, it is important that they be constructed in such a way that they do not interfere with rapid movement of military equipment. A well-designed station can have high-level platforms to enhance passenger mobility and be compatible with wide military loads. On a multiple-track line, only certain tracks may need to be adjacent to high-level platforms. Freight trains with wide loads can usually pass through these stations on tracks that are not next to the high-level platforms as shown in Figure 5. Another possibility is the construction of gauntlet tracks[13] by the high level platforms as shown in Figure 6. The rails nearer the platform are used by passenger trains; the farther pair of rails is for freight trains with overwidth loads. Wheelchair lifts (Figure 7) or offset mini high platforms (Figure 8) with bridge plates are options for wheelchair access at stations where construction of high-level platforms is not feasible.

[13] Gauntlet tracks consist of two pairs of running rails that overlap.

Figure 5. Multiple tracks by a passenger station platform.

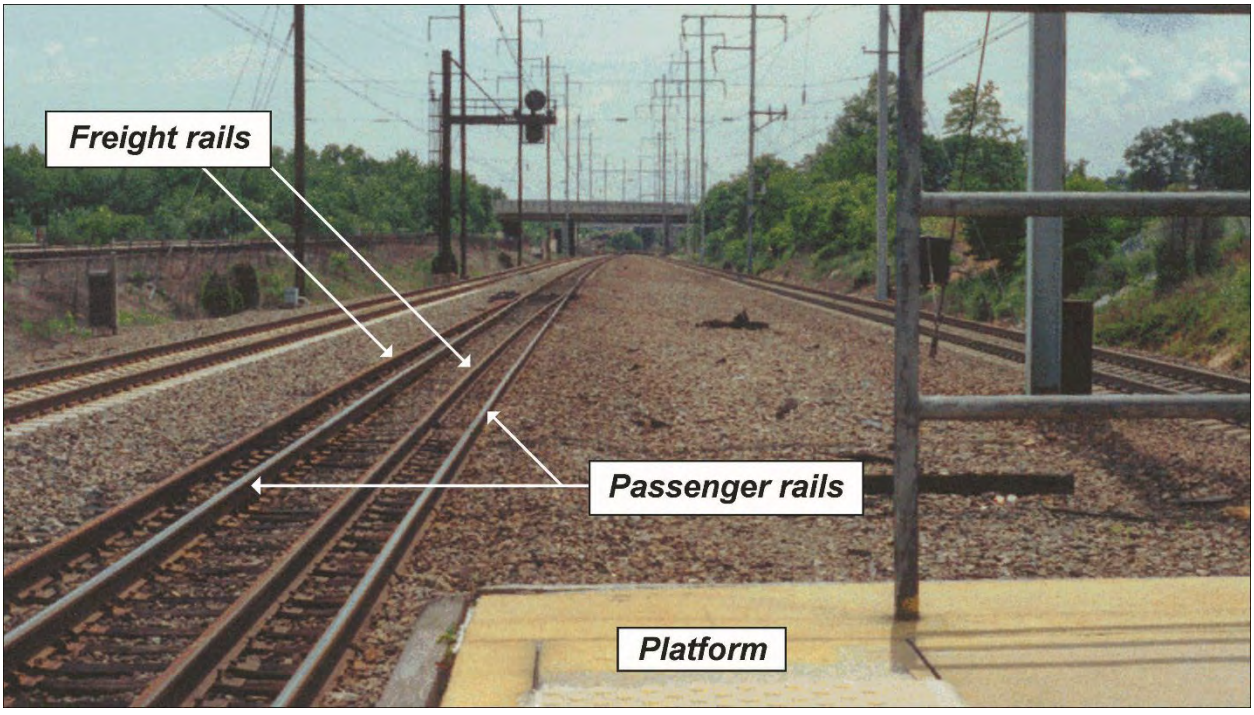


Figure 6. Gauntlet tracks by a high-level platform.

Figure 7. Wheelchair lift.

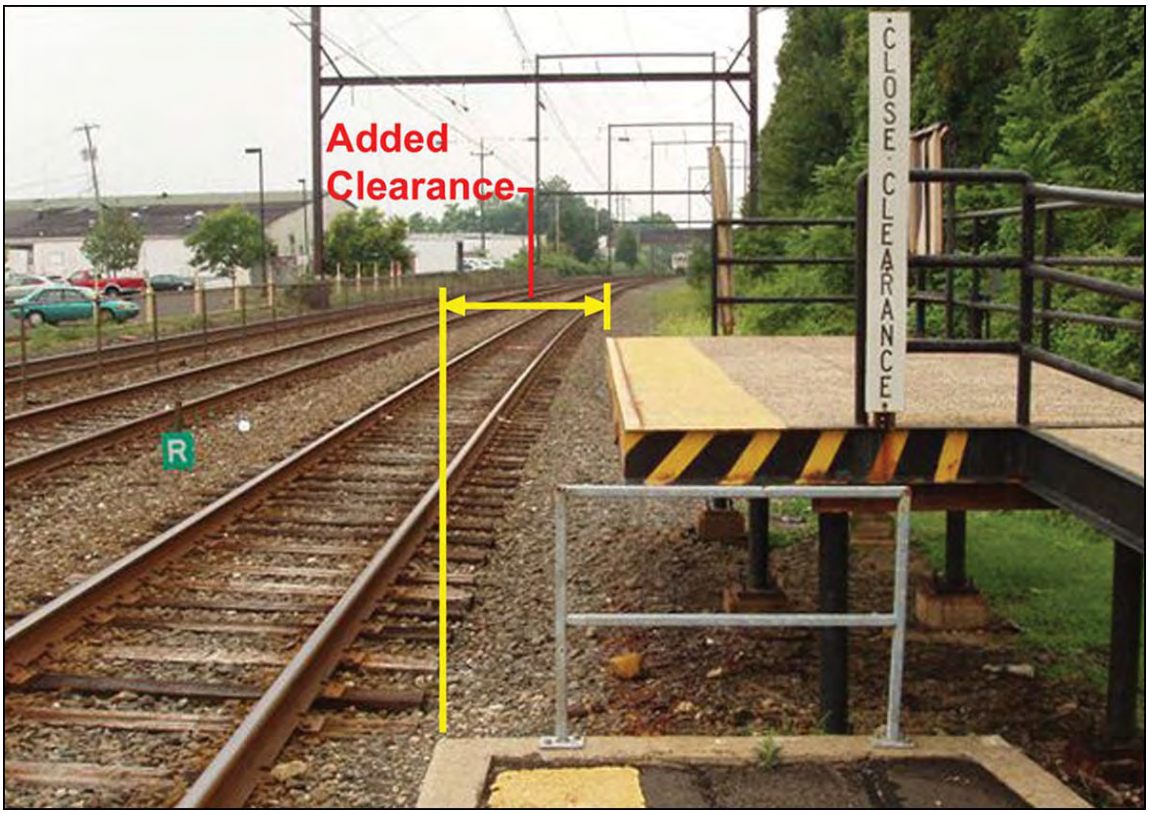


Figure 8. Offset mini high platform.

5. WEIGHT CAPABILITIES

The STRACNET has the weight bearing capability to transport common military loads in their normal transport configurations. The gross weight limitations of the railroad track and structures are high relative to highways. Individual locomotives can weigh in excess of 400,000 pounds. SDDCTEA analyzed the weight capabilities of defense rail lines and found no deficiencies.

When STRACNET was first developed, the industry standard for gross weight was 263,000 pounds for 4-axle cars or an individual axle load of 65,750 pounds. Theoretically this would allow a freight car with six axles to have a gross weight on rail of 394,500 pounds. The military commonly ships two 70-ton tanks on 6-axle heavy-duty flatcars, which results in a gross weight on rail of less than 380,000 pounds, well within the limits of 263K lines. All STRACNET and connector lines have a capacity of at least 263,000 pounds, and tanks have successfully been moved by rail in America for many years. Transporting two tanks on one heavy-duty flatcar is the greatest weight challenge the military commonly gives to the American rail carriers. Furthermore, today the rail industry standard is that rail lines should be able to support freight cars with a gross weight of up to 286,000 pounds riding on four axles, or an individual axle load of up to 71,500 pounds. While not all rail lines meet this 286K standard, most do and more lines will be upgraded to the 286K standard in the future. This standard provides a substantial cushion above the weights required to transport military items.

All STRACNET and connector lines meet at least the old 263,000 pound standard, and many of them meet the newer 286,000 pound standard. Therefore, the weight limits of America's rail network do not constrain the ability to move heavy pieces of military equipment by rail. As is the case with oversize loads, overweight loads can often be routed on non-STRACNET lines, since virtually no railroad main lines fail to meet at least the 263K weight standard.

The designation of a line as STRACNET is useful for planning but provides no movement authority for a shipment that is oversize and/or overweight. All oversize/overweight shipments must be approved by the clearance departments of all the rail carriers involved in their route prior to movement.

6. CYBERSECURITY OF RAILROAD INFRASTRUCTURE SYSTEMS

Since 2021, the Department of Homeland Security (DHS) has announced two new cybersecurity directives issued by the Transportation Security Administration (TSA). These cybersecurity directives are designed to better protect freight railroads and passenger rail transit in the US. This is in response to the ongoing cybersecurity threat to surface transportation systems and associated infrastructure.

The new rules make it mandatory for the owners and operators of certain rail companies to have a cybersecurity coordinator, report cybersecurity incidents to the DHS Cybersecurity and Infrastructure Security Agency (CISA) in 24 hours or less, create a cybersecurity incident response plan, and complete a cybersecurity vulnerability assessment to identify potential gaps or vulnerabilities in their systems.

The RND program will continue to inform and support Federal interagency partners such as DHS as they work to mitigate cybersecurity threats to US rail infrastructure. More specifically, RND provides information regarding DOD's peacetime and potential wartime use of the civil rail network for use in DHS plans and programs.

TSA's cybersecurity directives and related guidance can be found in the Surface Transportation Cybersecurity Toolkit at the following URL: https://www.tsa.gov/for-industry/surface-transportation-cybersecurity-toolkit.

V. CONCLUSIONS

SDDCTEA and FRA reviewed civil rail lines important to national defense. The State maps in Appendix A identify STRACNET and connector lines. The maps are supplemented by a list of DOD installations and activities requiring rail service in Appendix B.

Almost all designated lines meet defense readiness requirements for maintenance condition, clearance, and gross weight capabilities.

Defense rail lines designated in Appendix A and the installations and activities identified as requiring rail service in Appendix B document defense rail requirements and supersede previous reports.

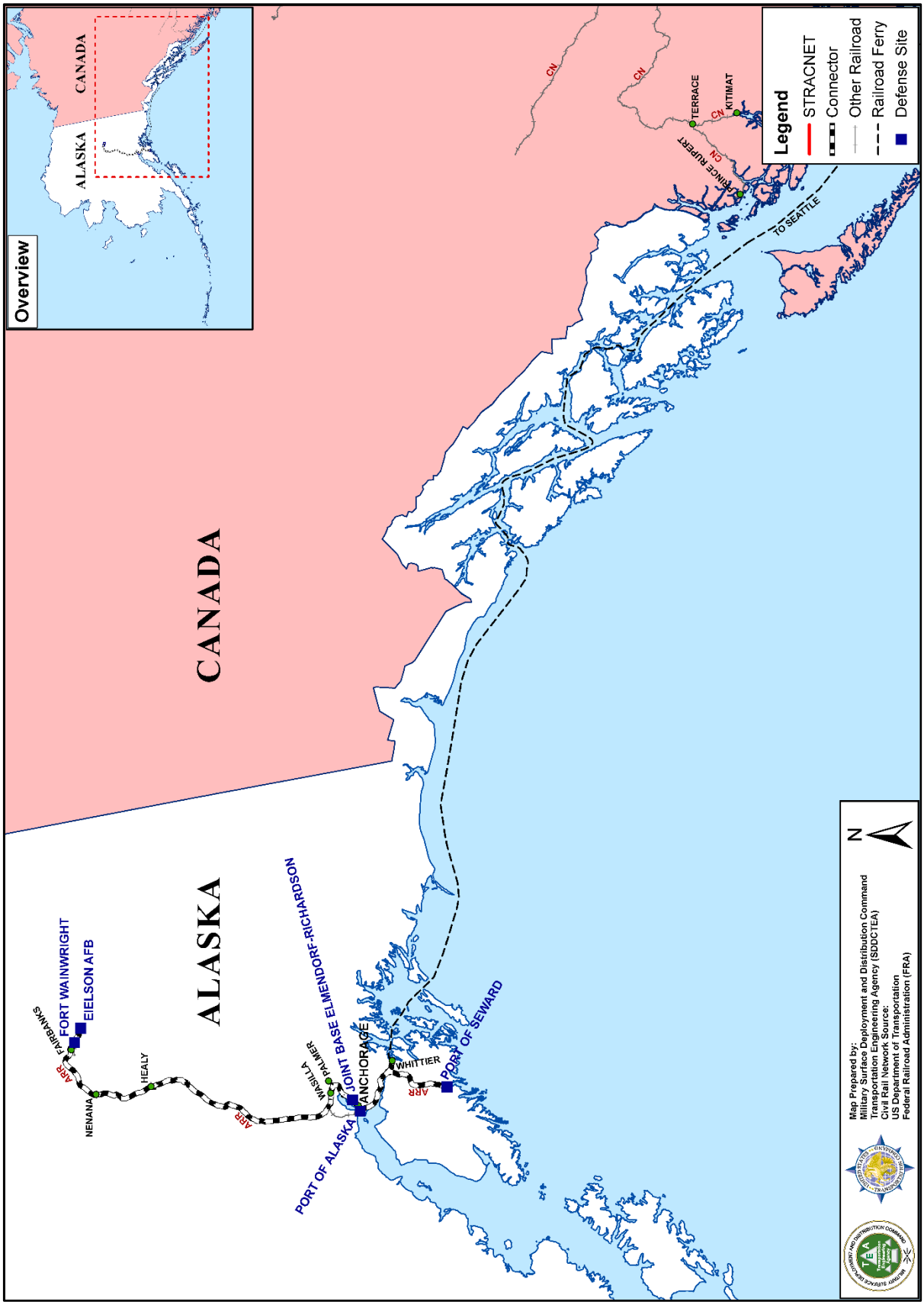
SDDCTEA will periodically review track inspection data provided by the FRA for defense lines. It is anticipated that future detailed reviews of defense rail requirements will be periodically conducted by SDDCTEA and FRA.

APPENDIX A

State Maps

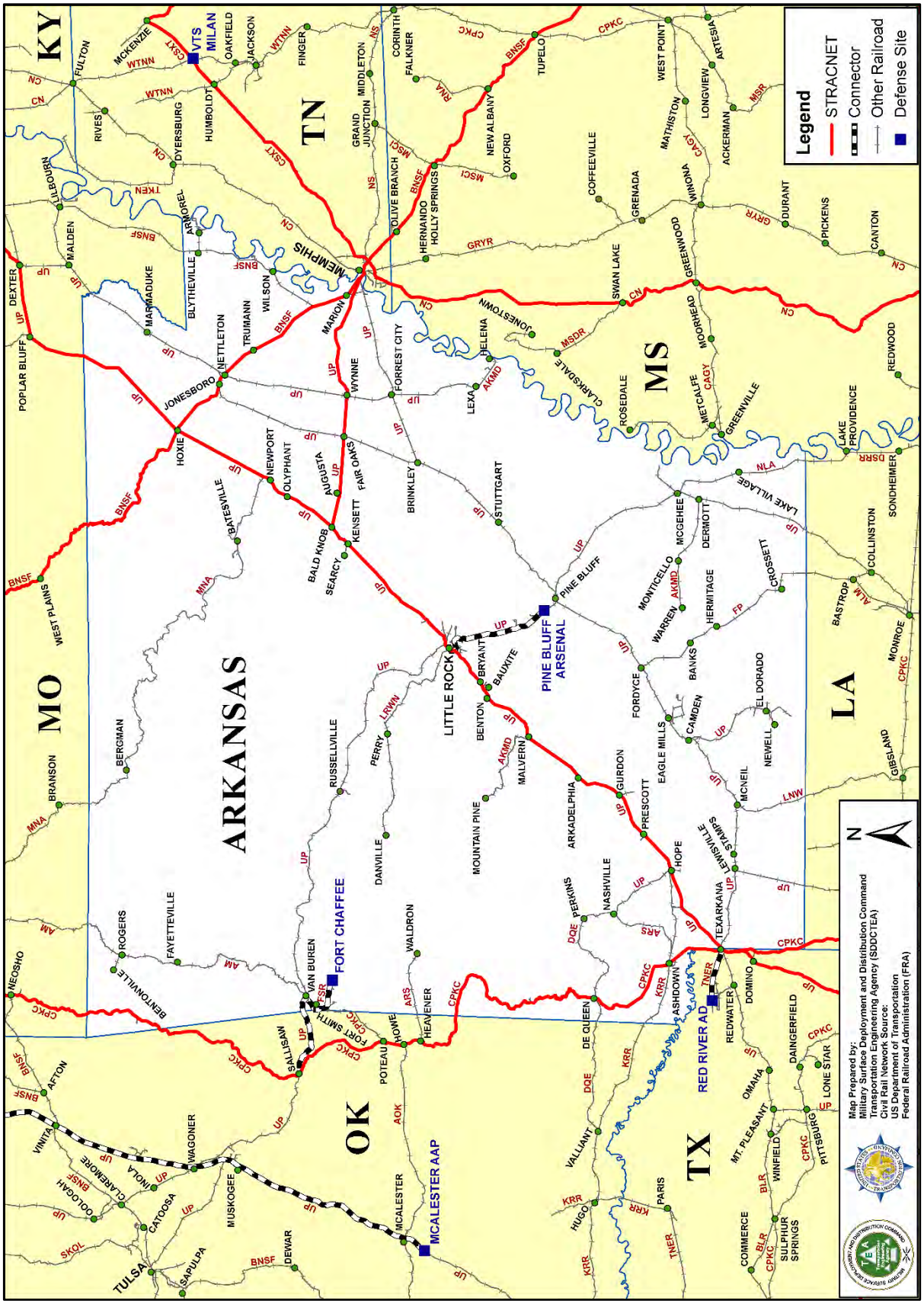
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



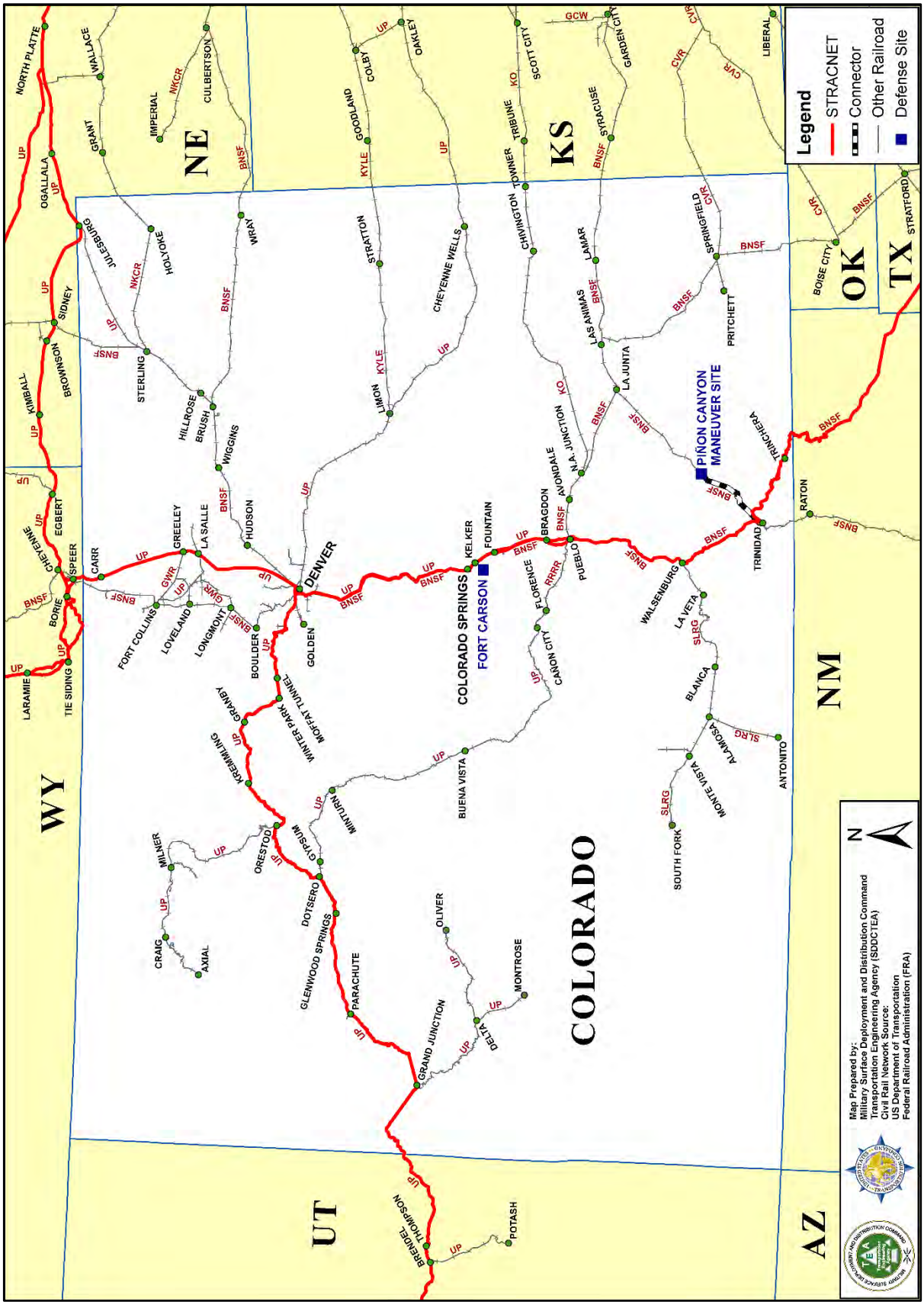
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

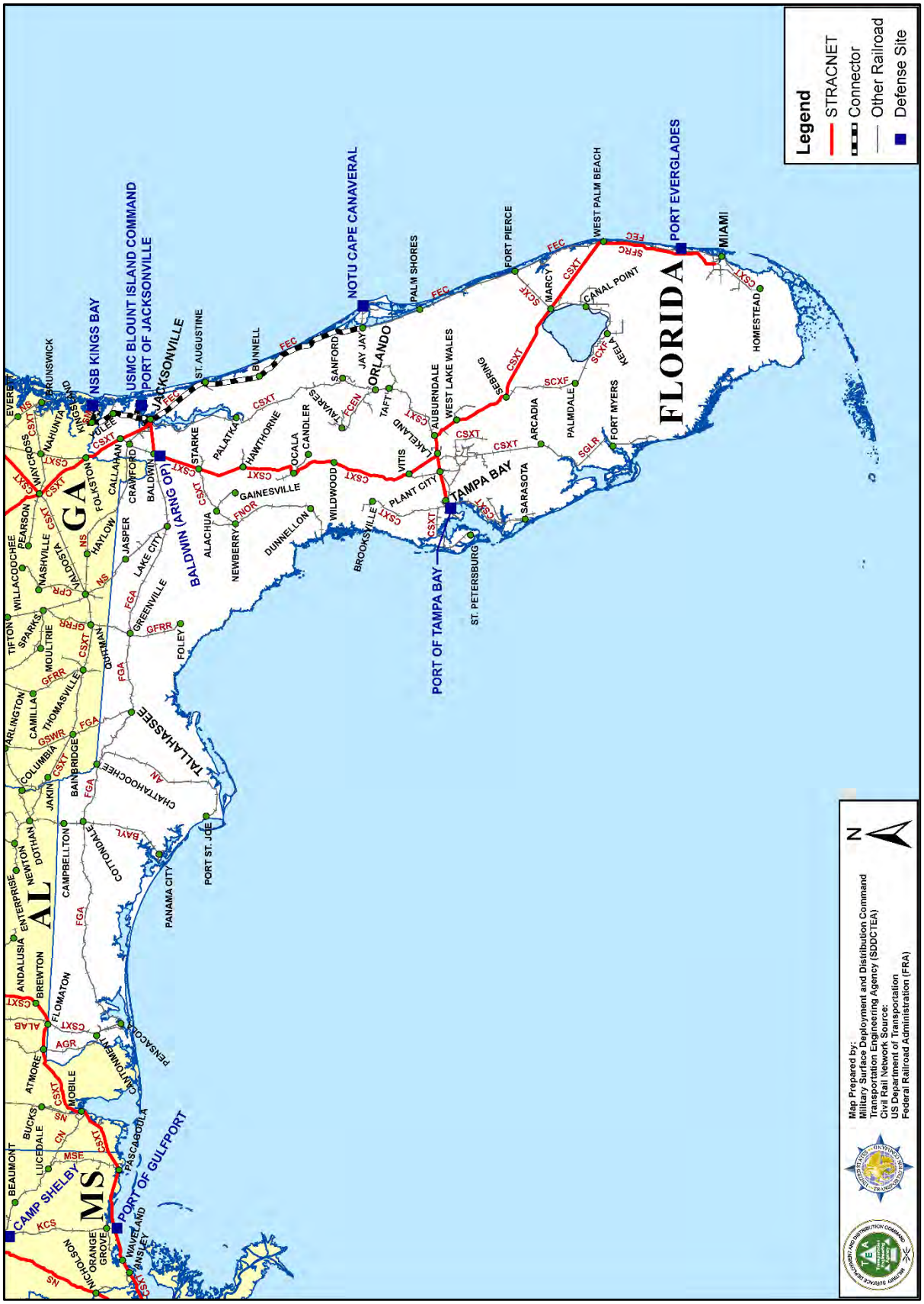
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET) and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

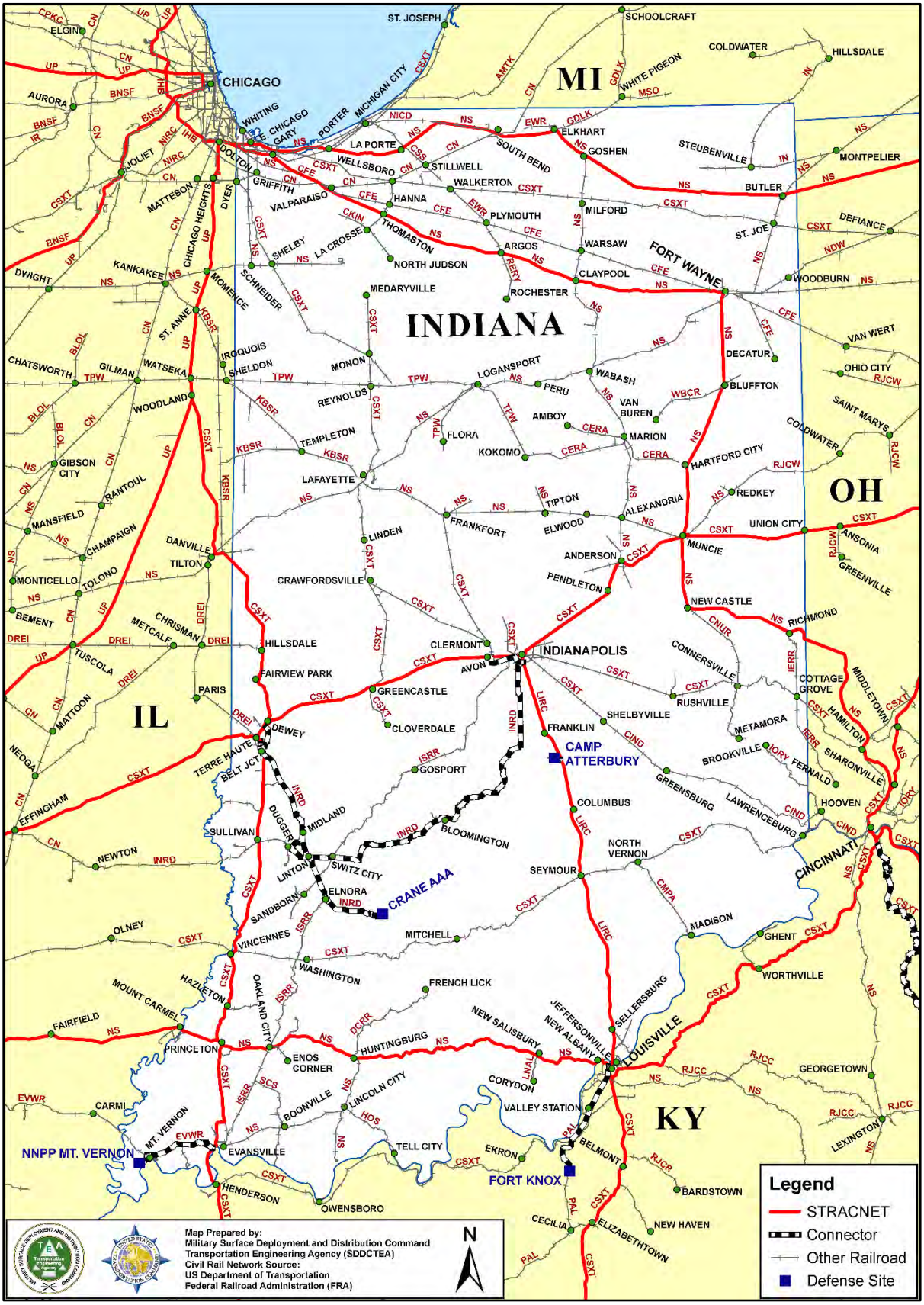


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

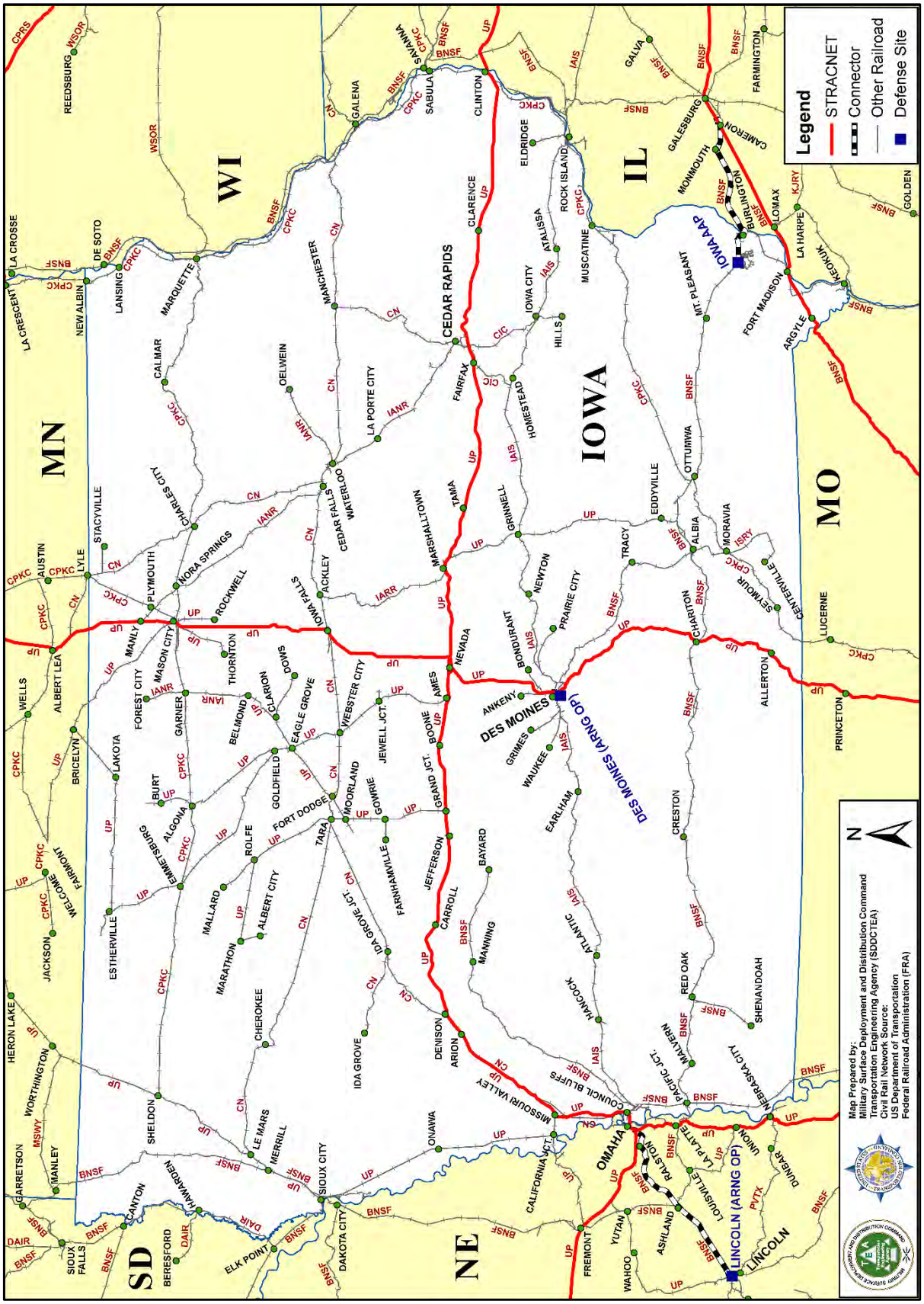
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

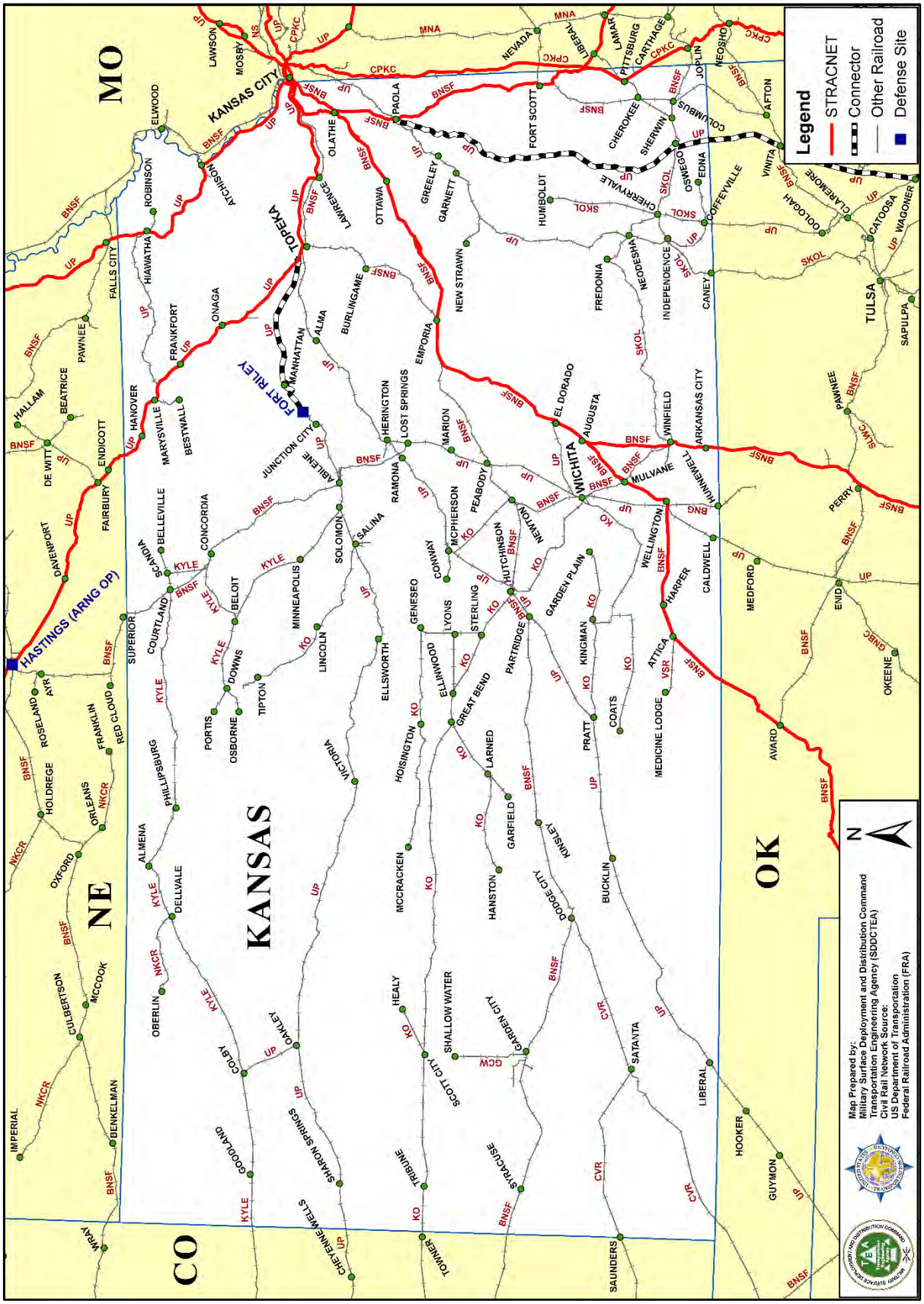
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



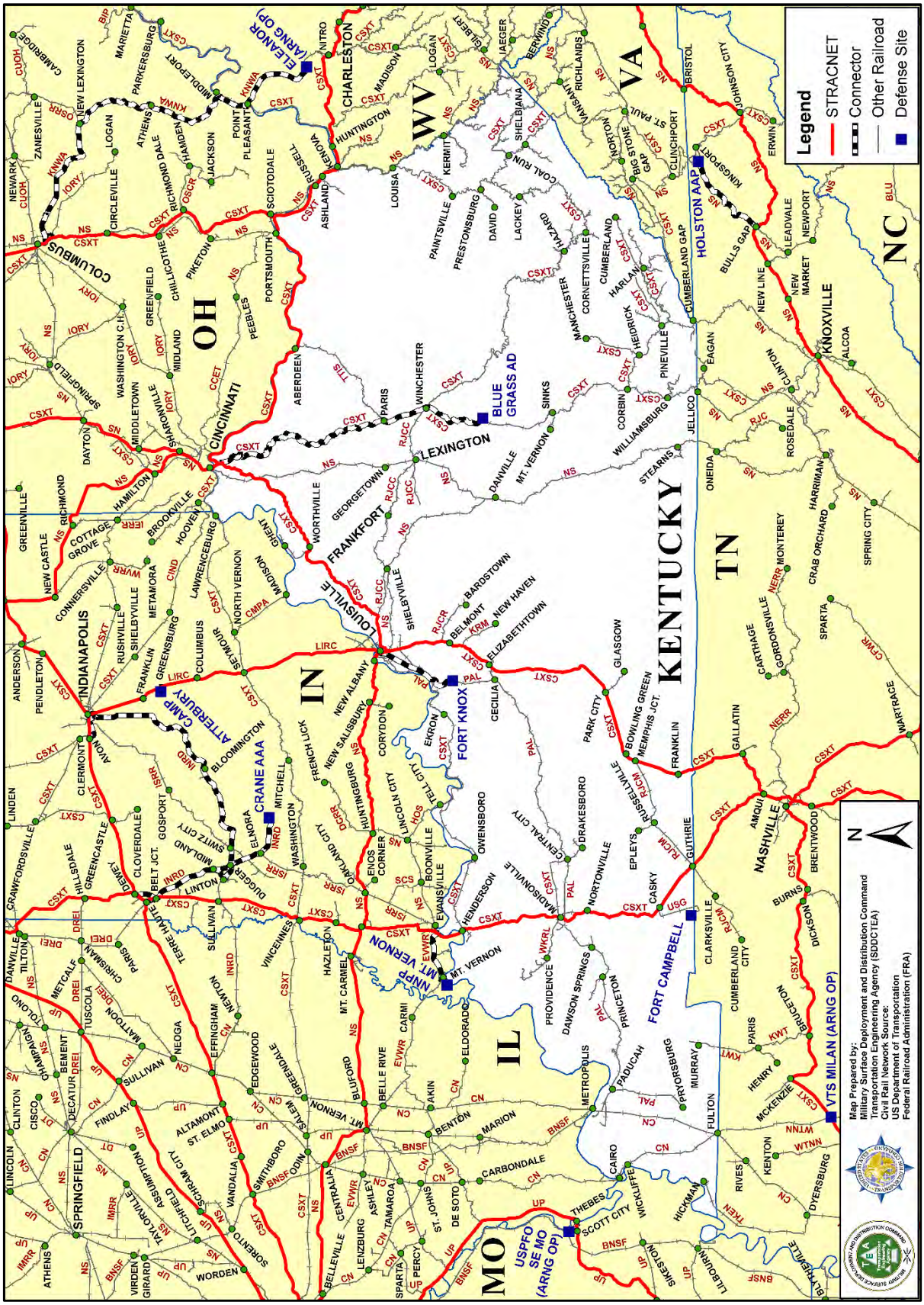
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



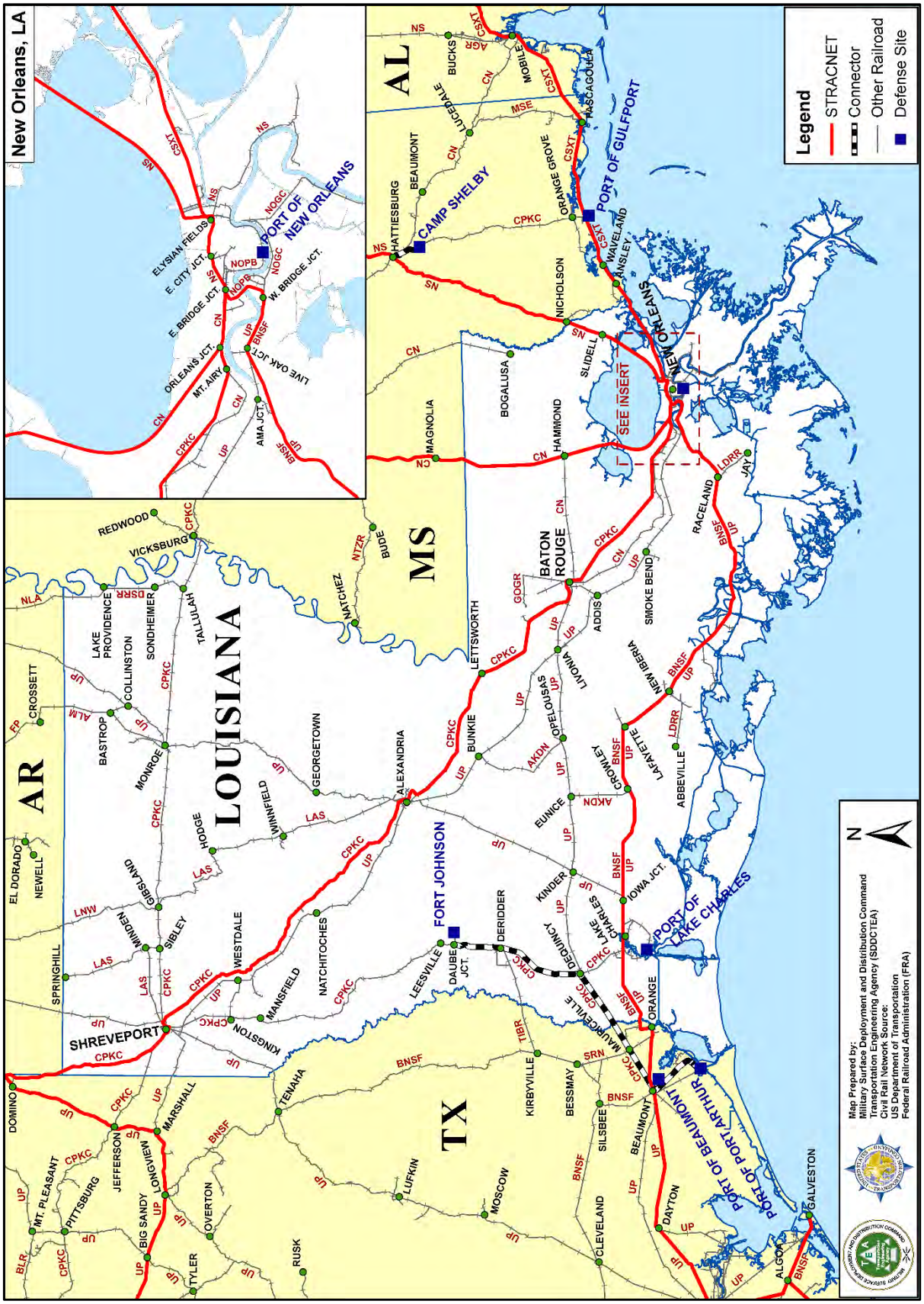
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



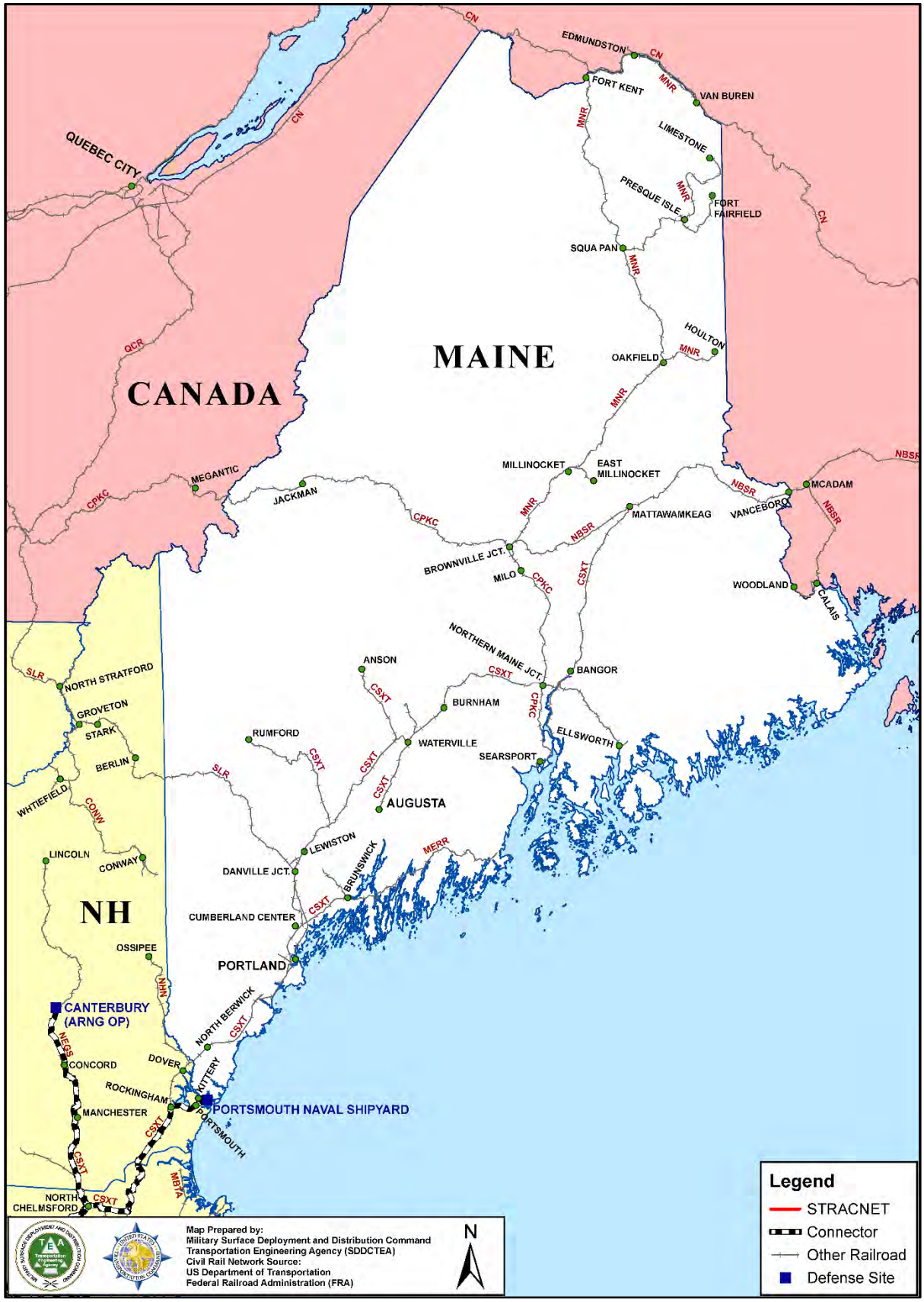
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



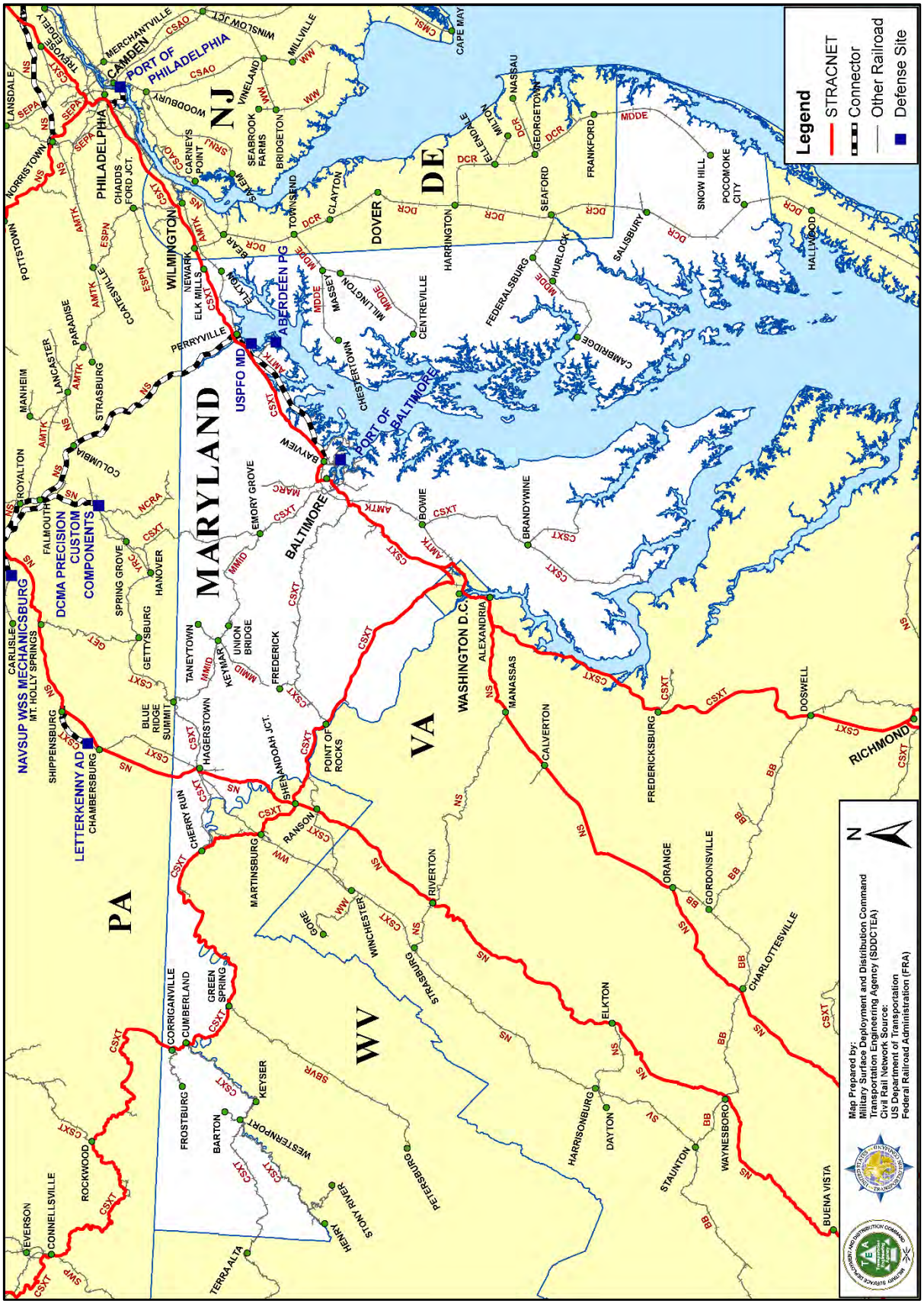
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



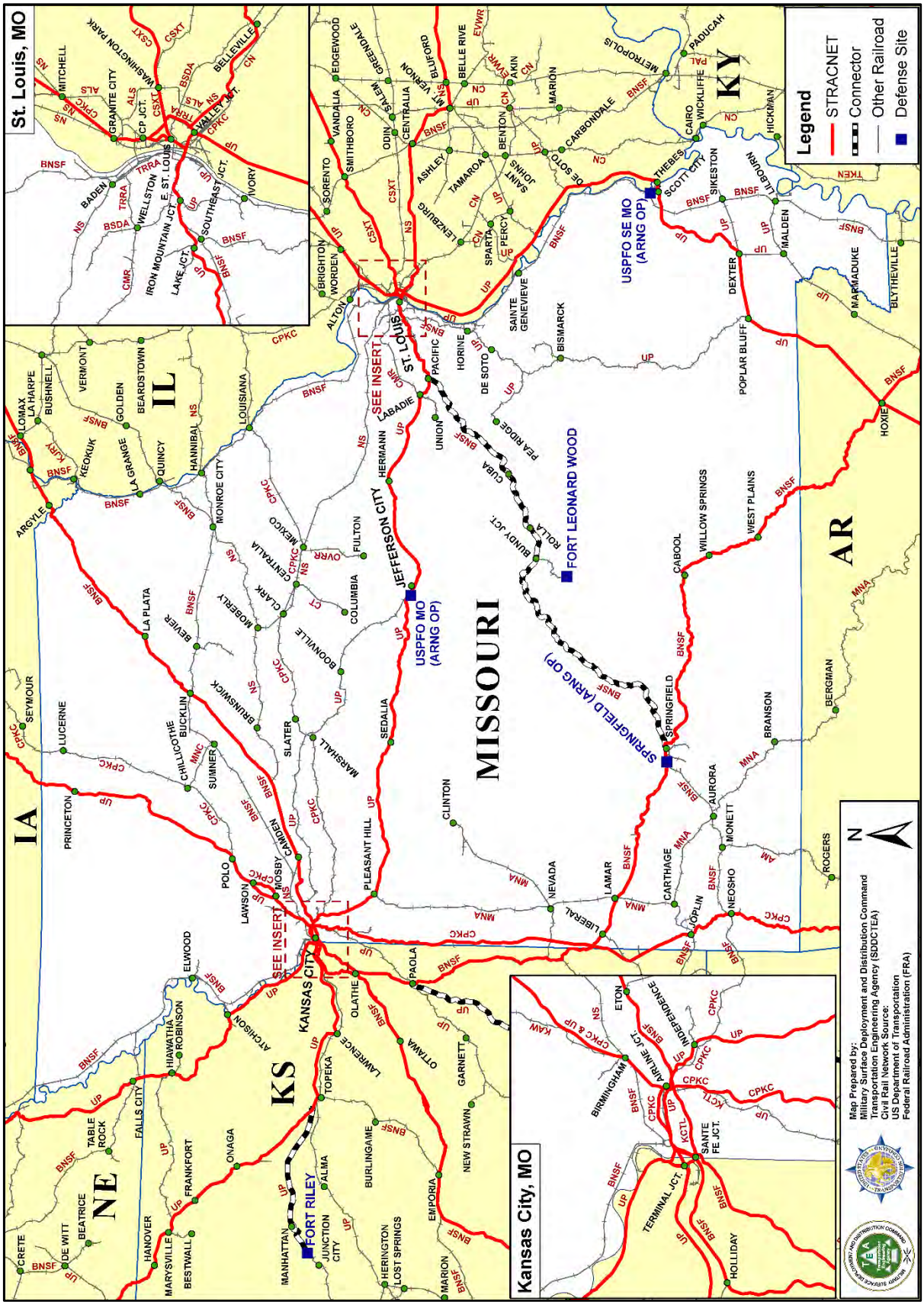
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

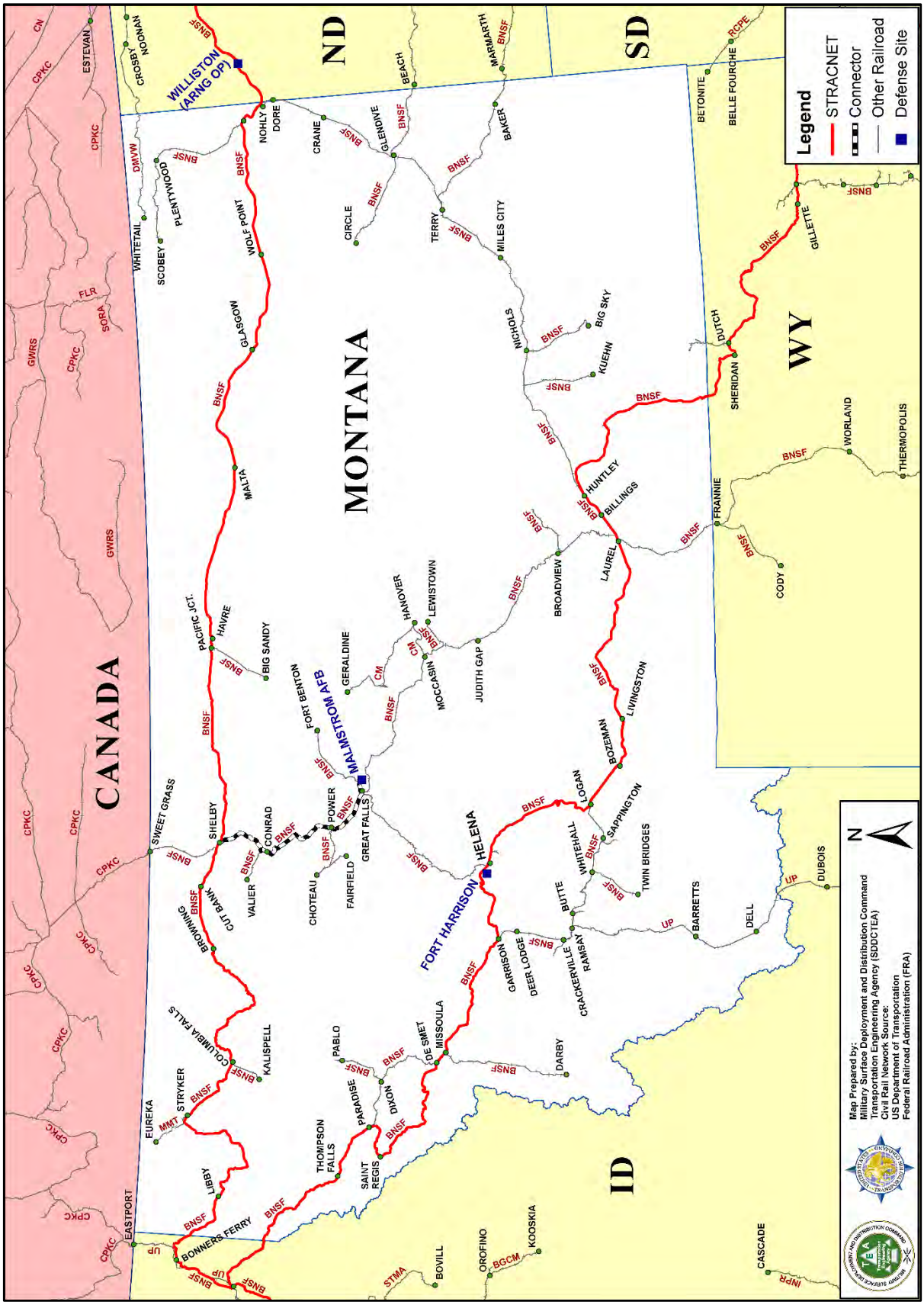
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

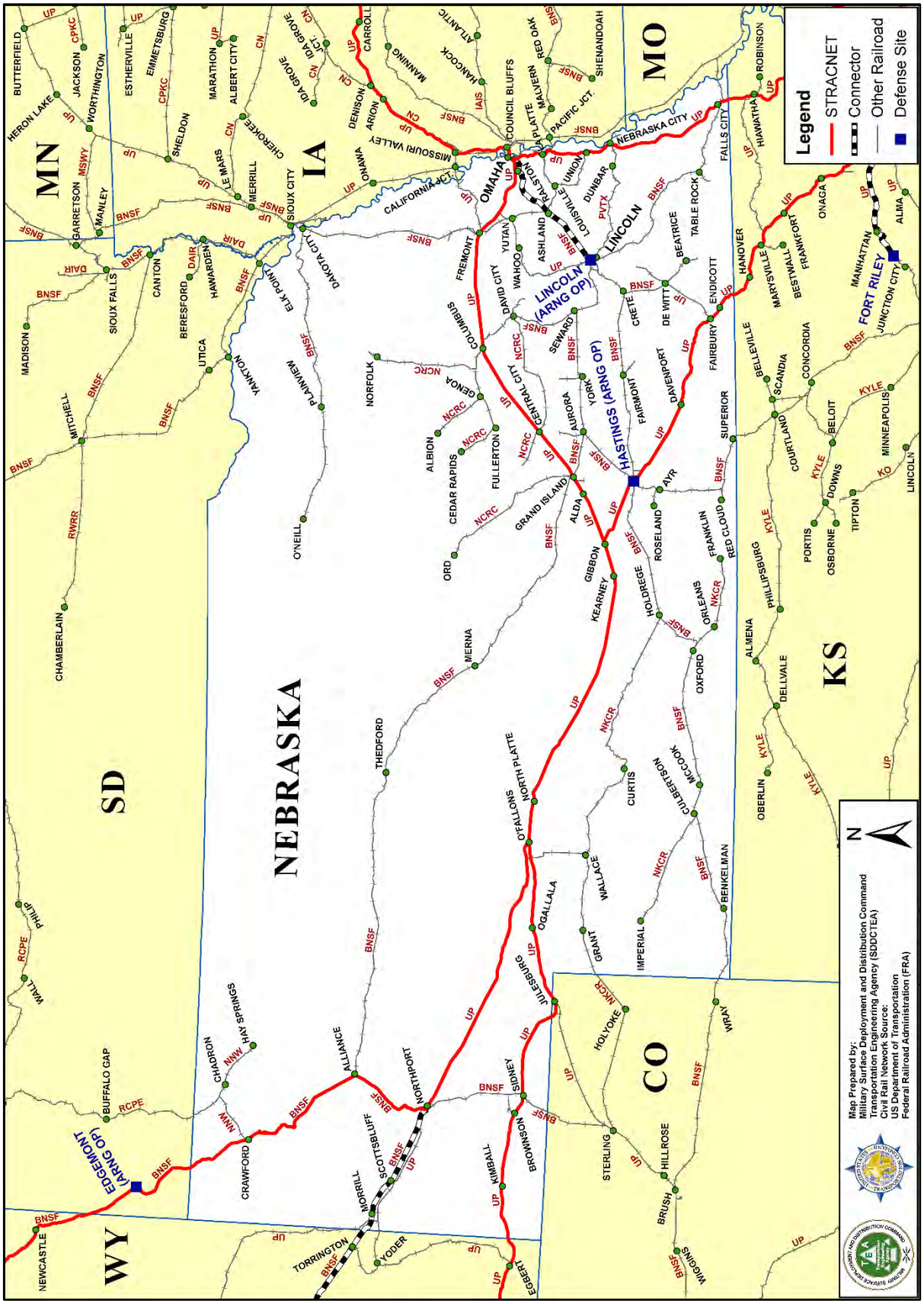
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



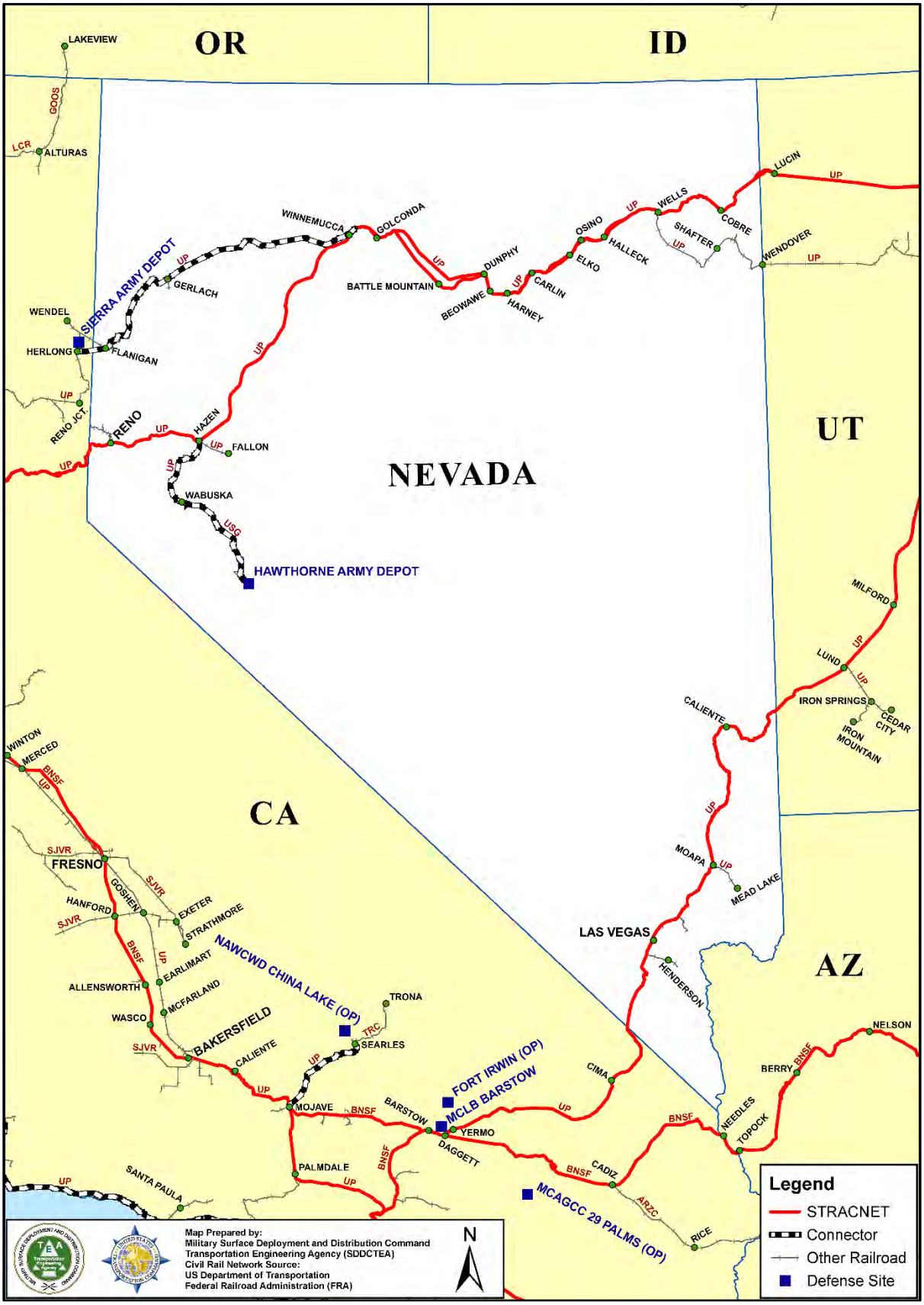
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



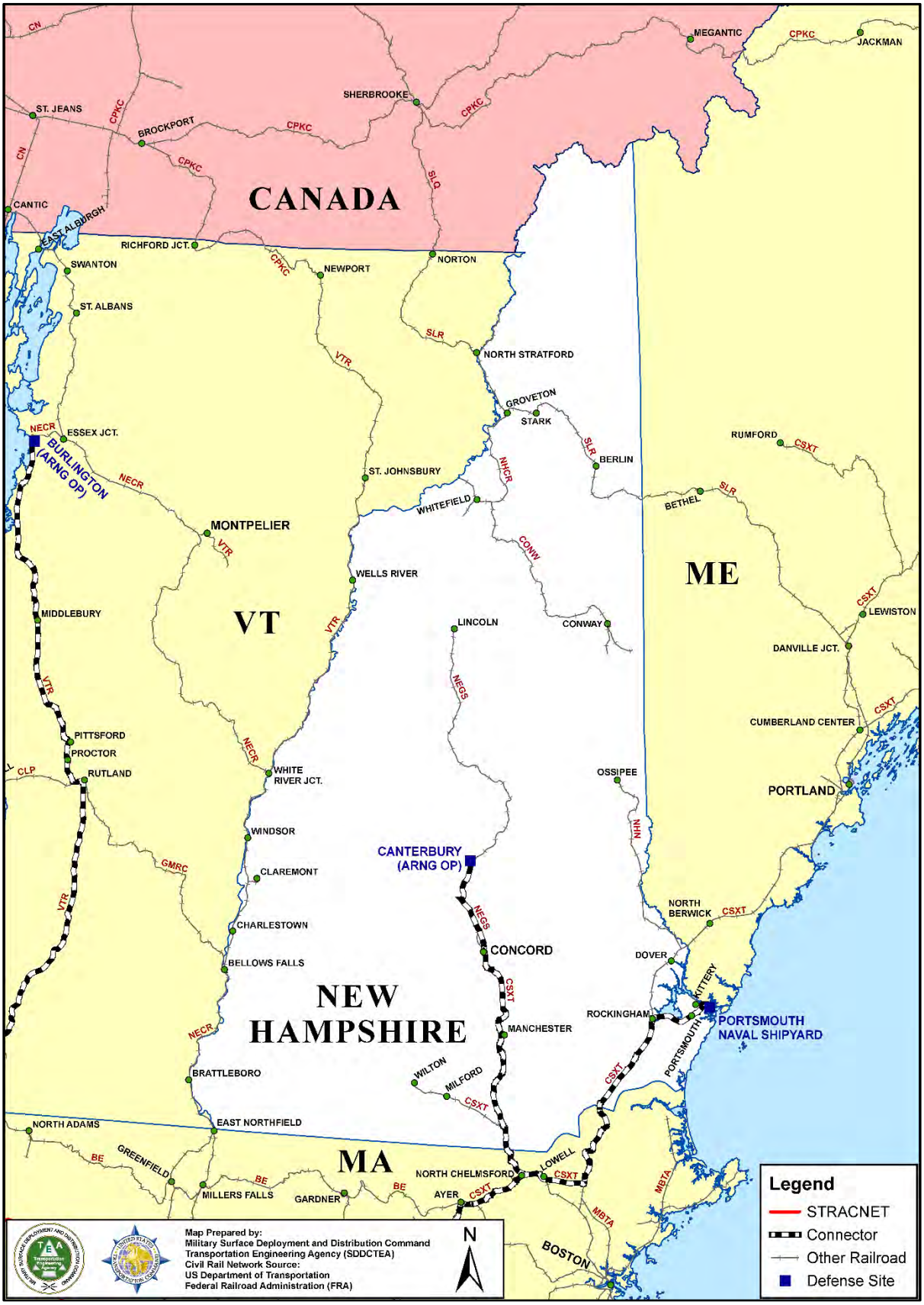
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

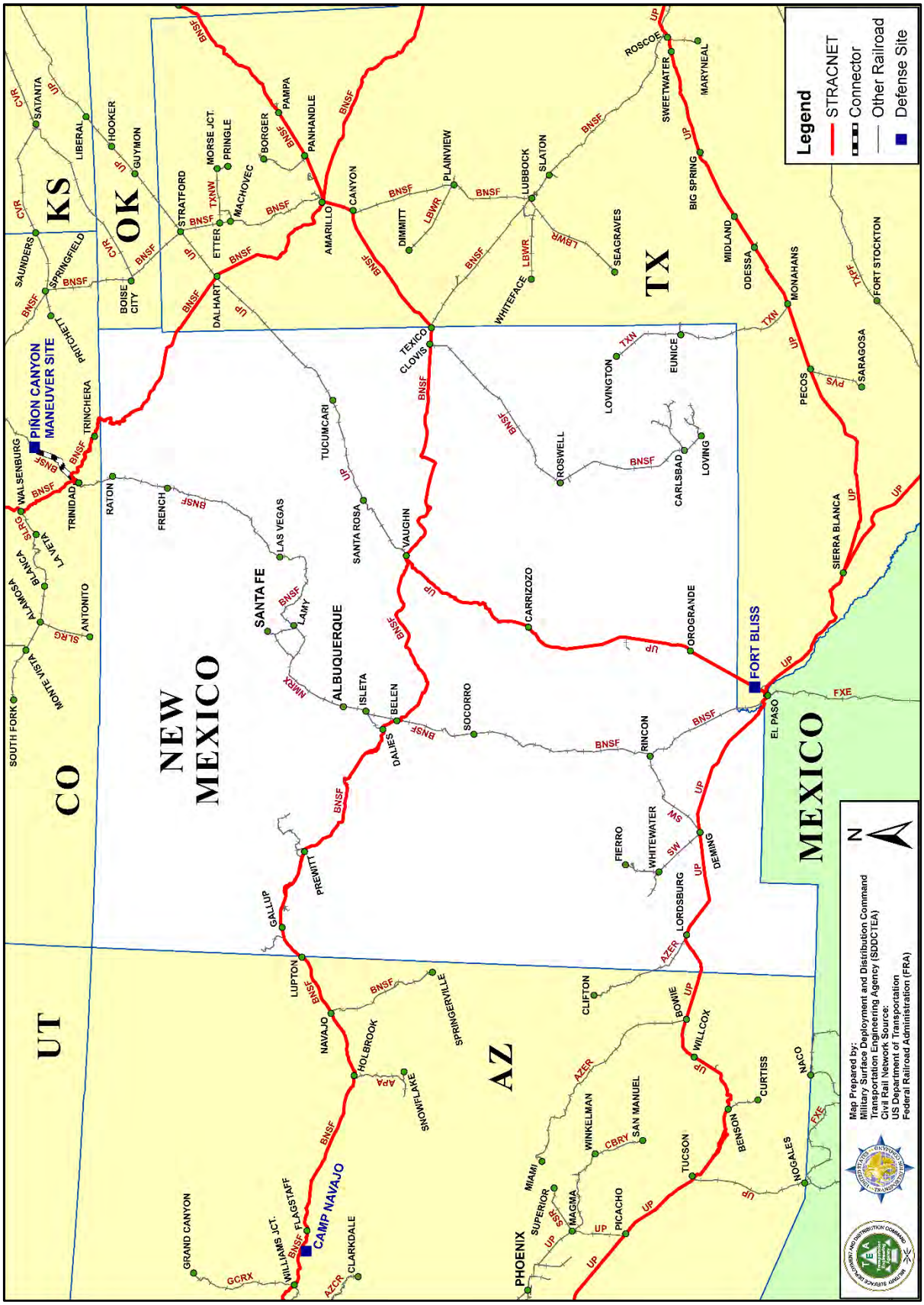


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

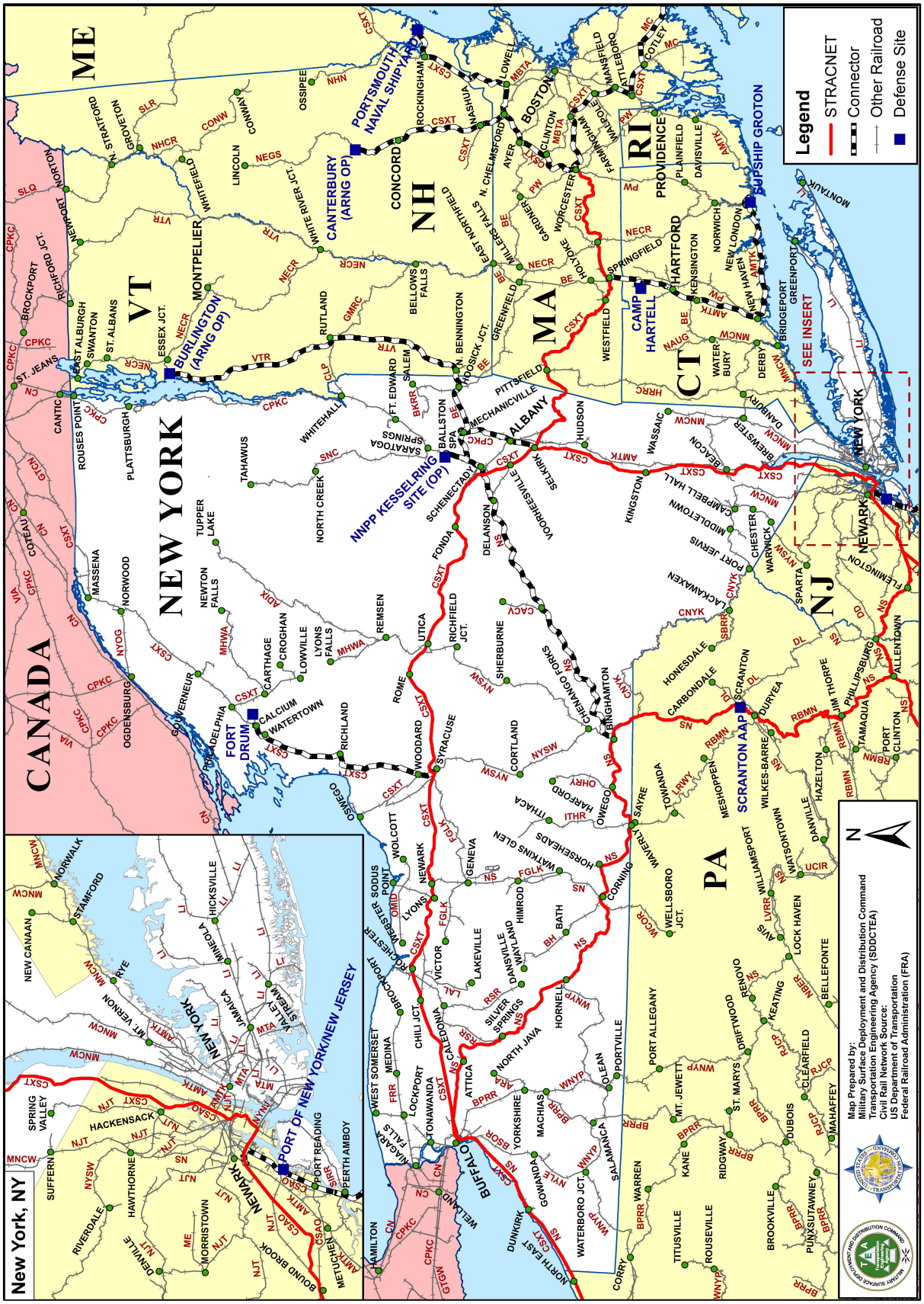


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

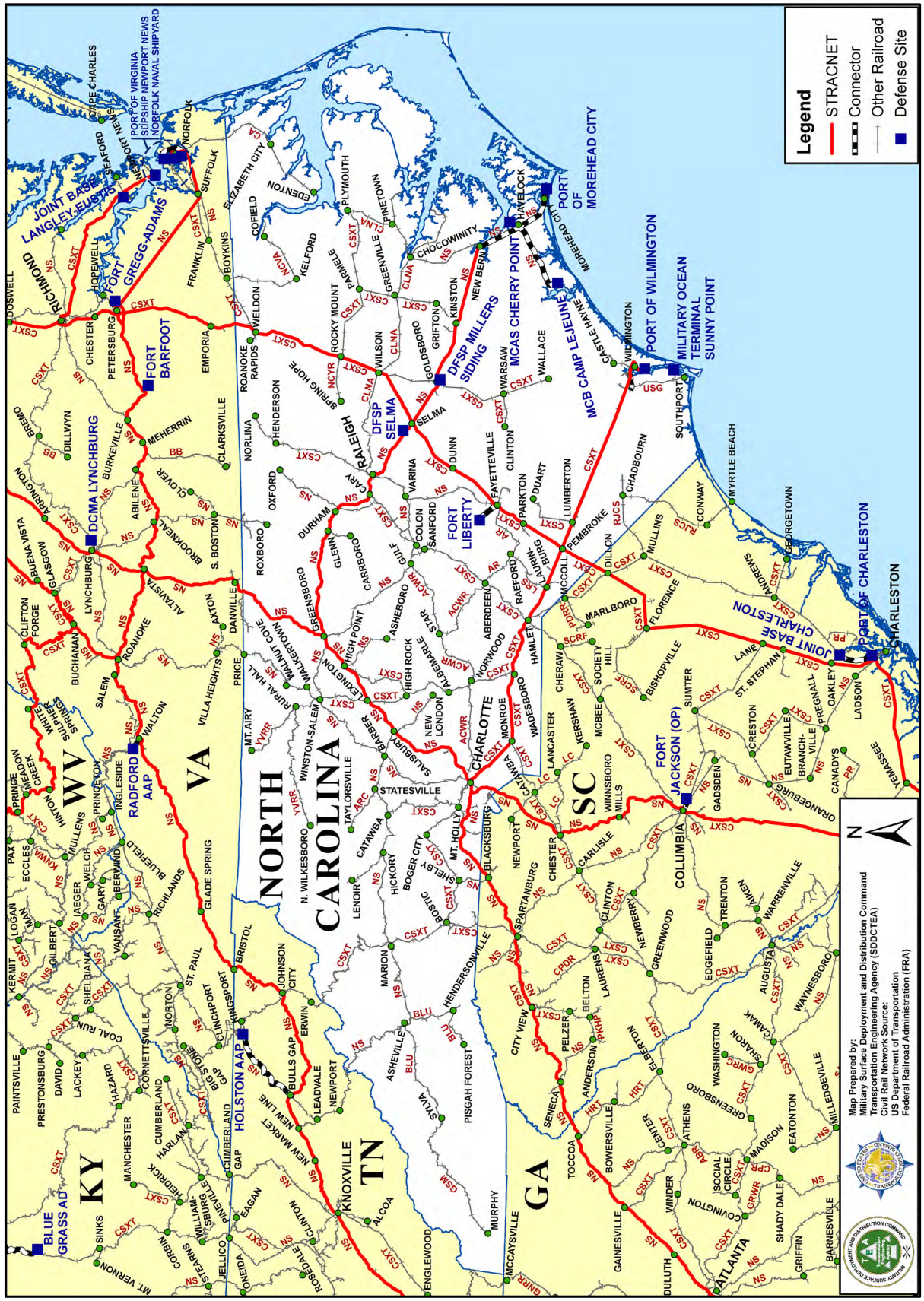
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



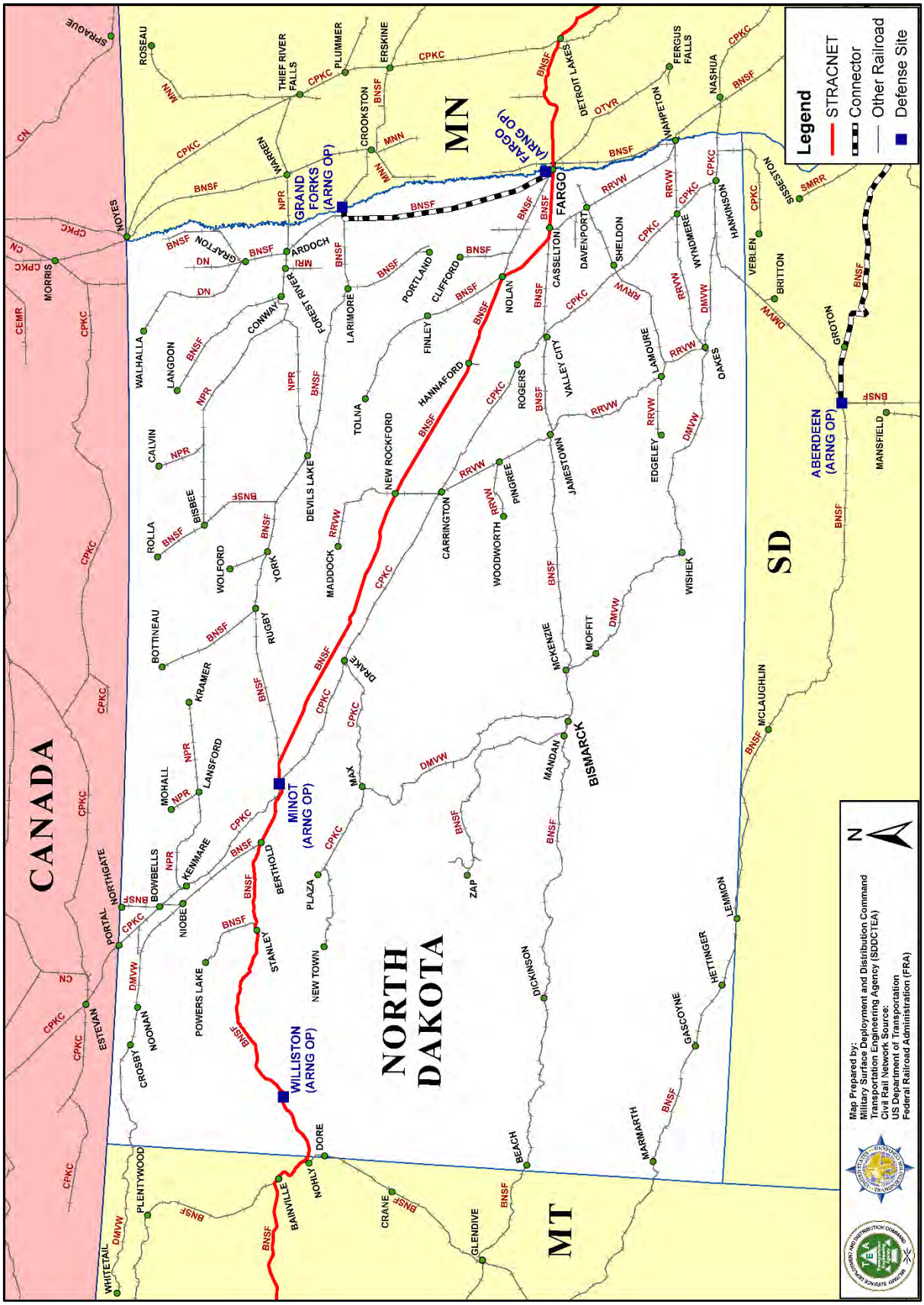
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



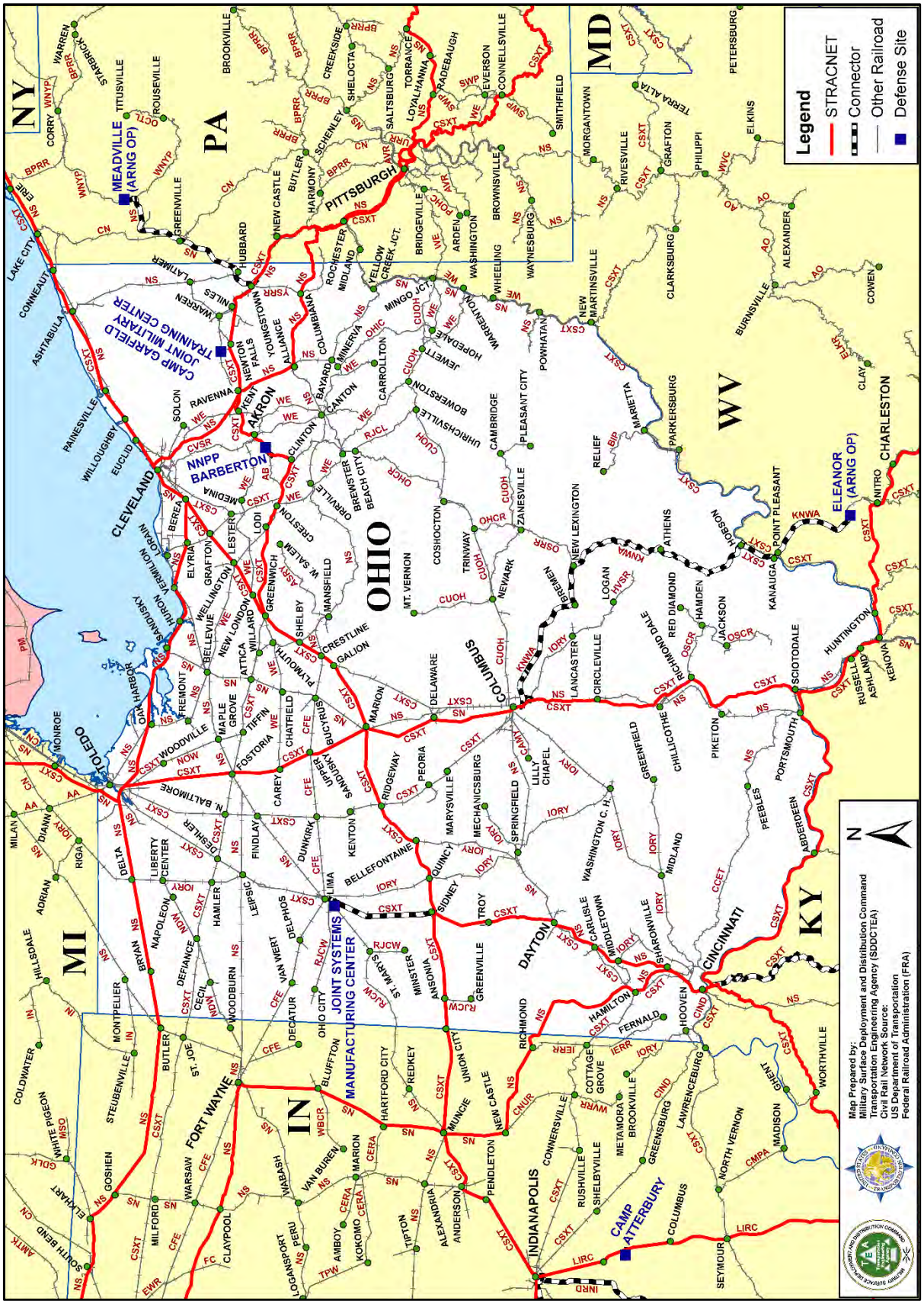
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



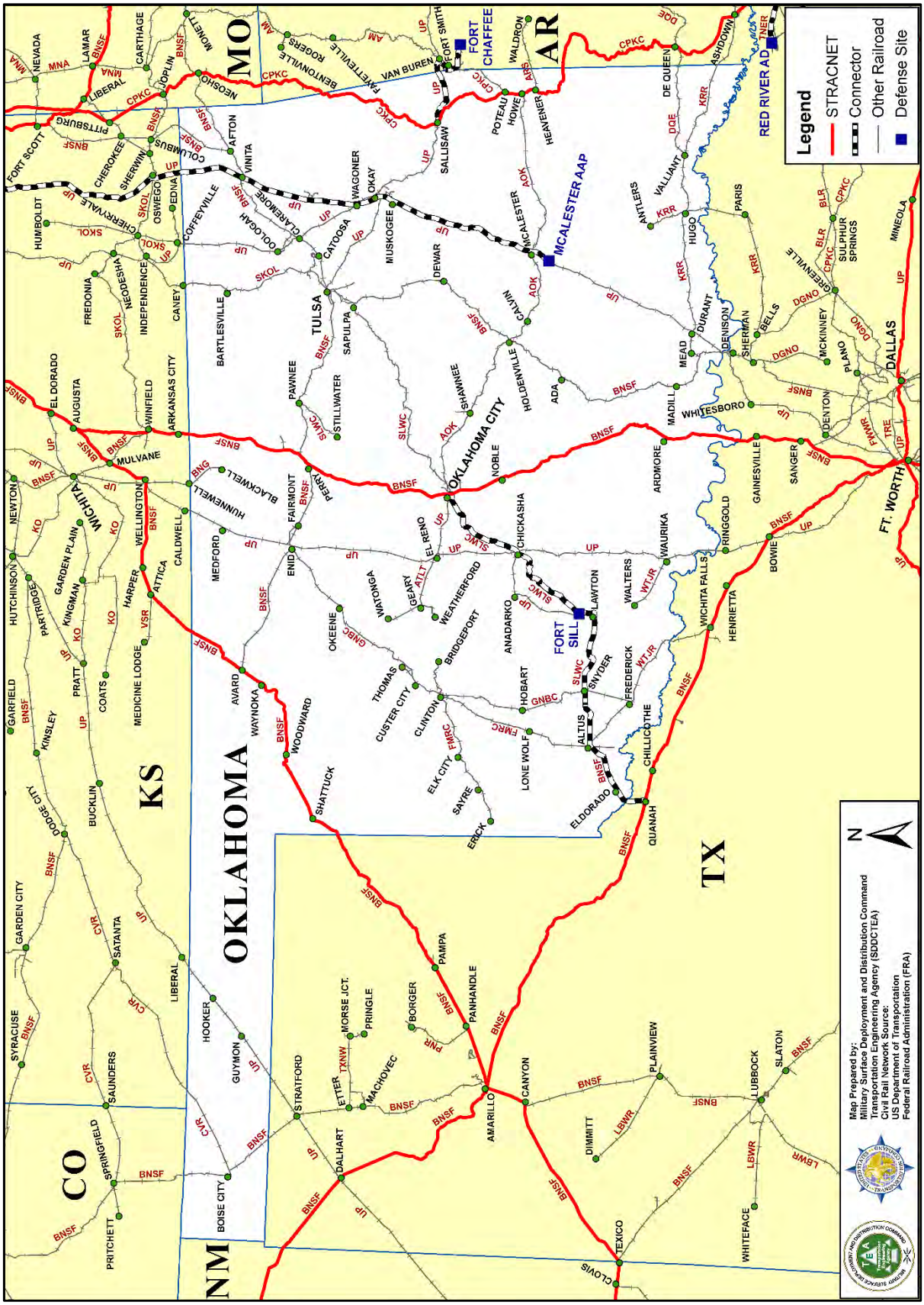
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



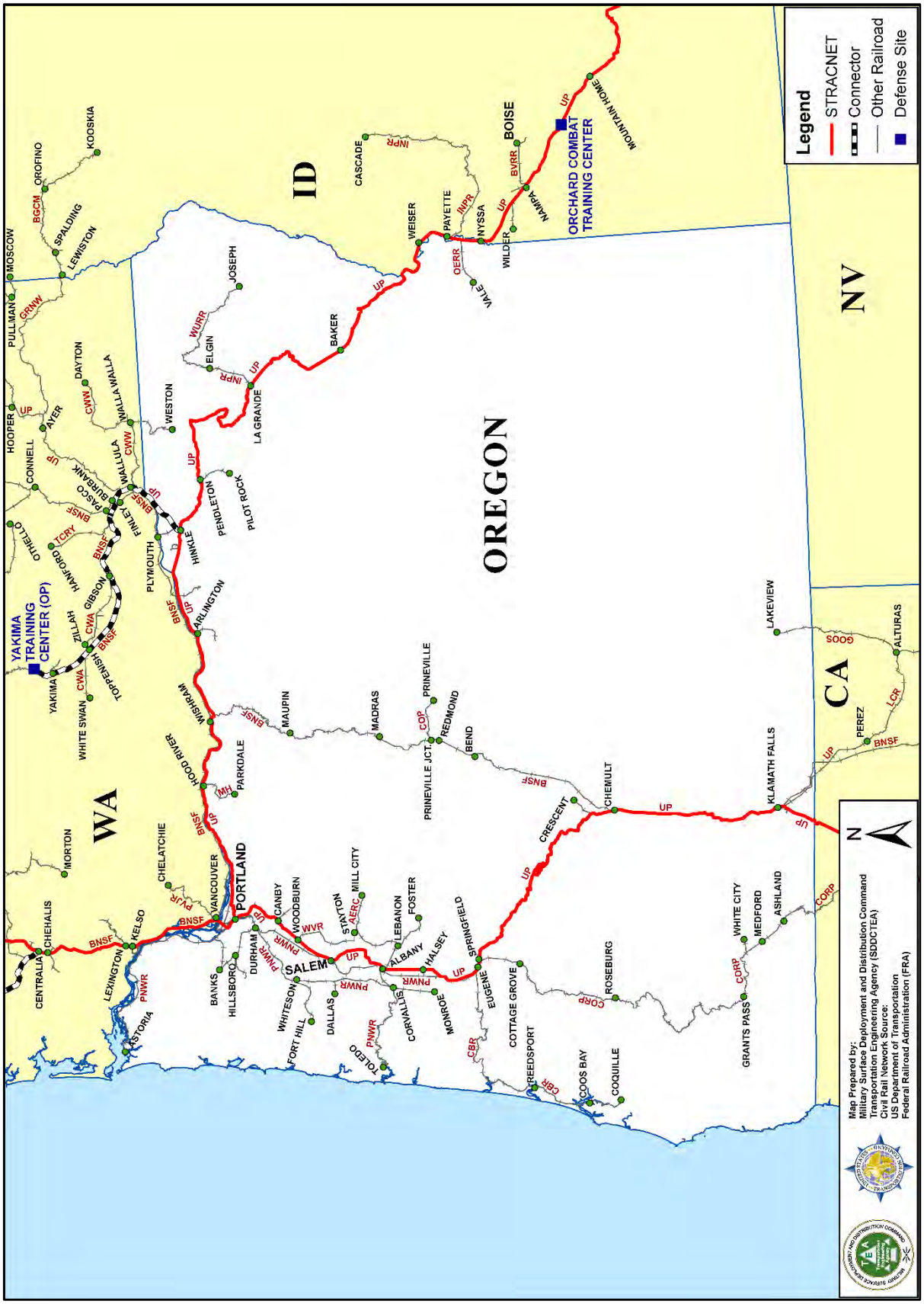
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



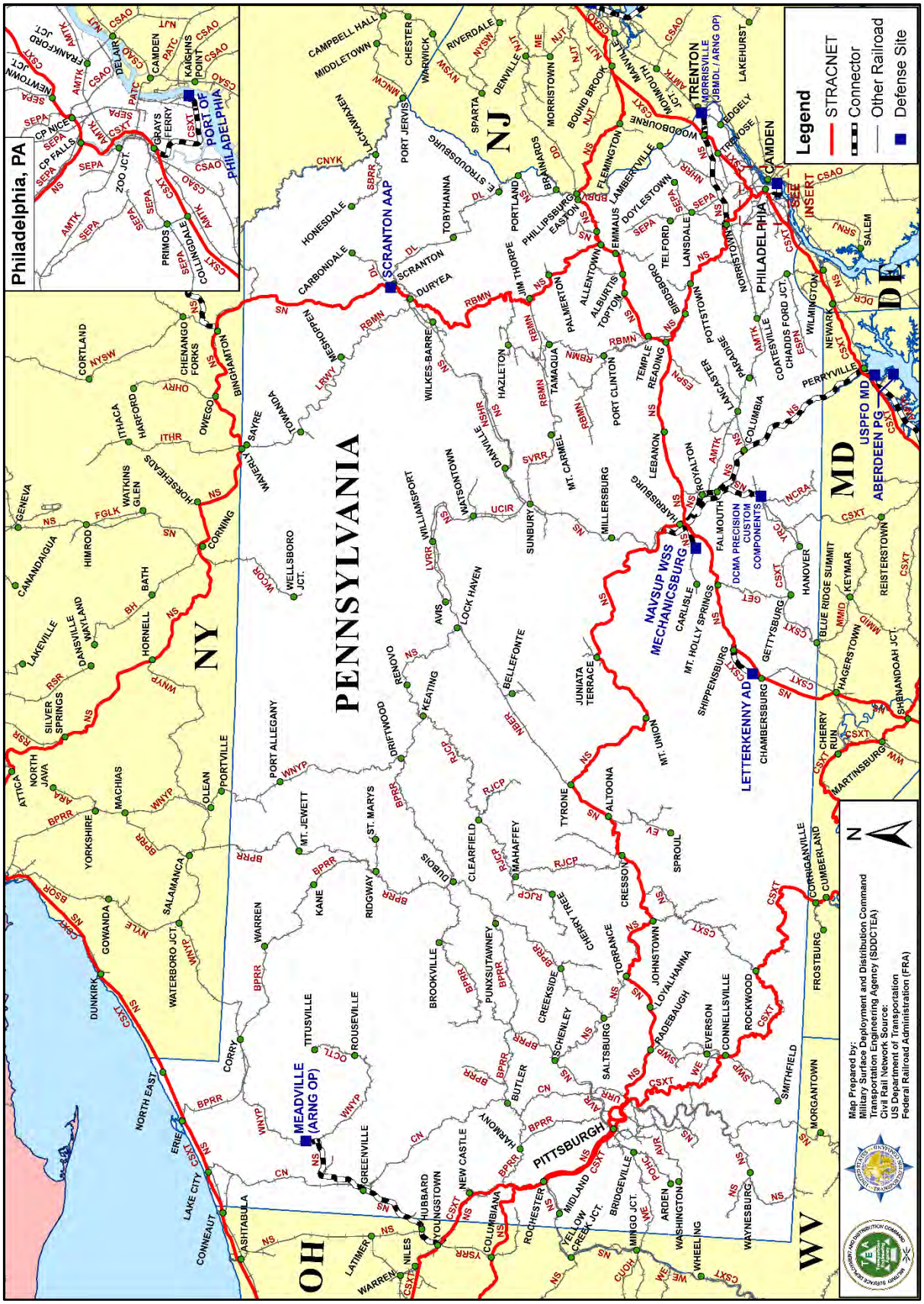
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

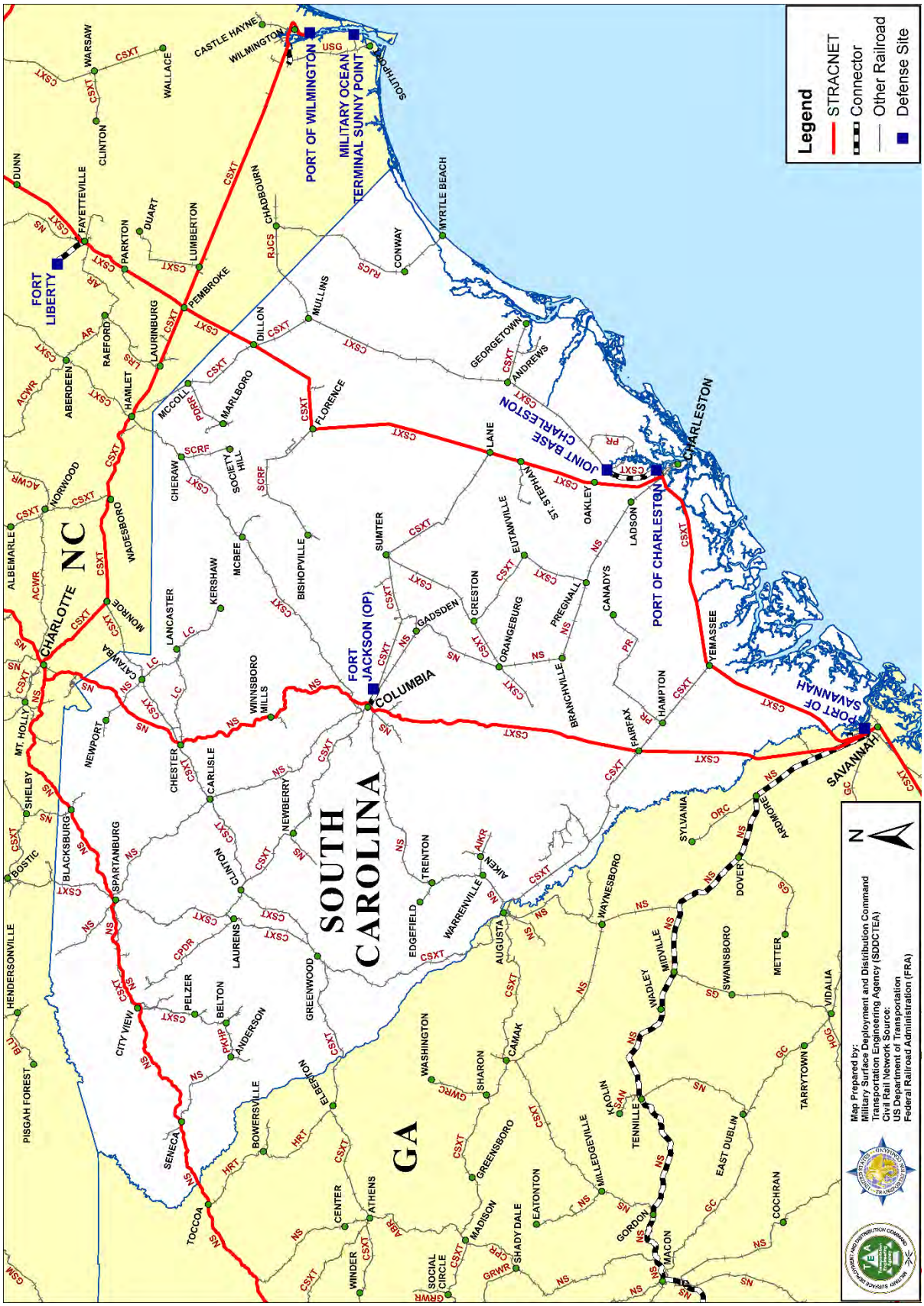


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

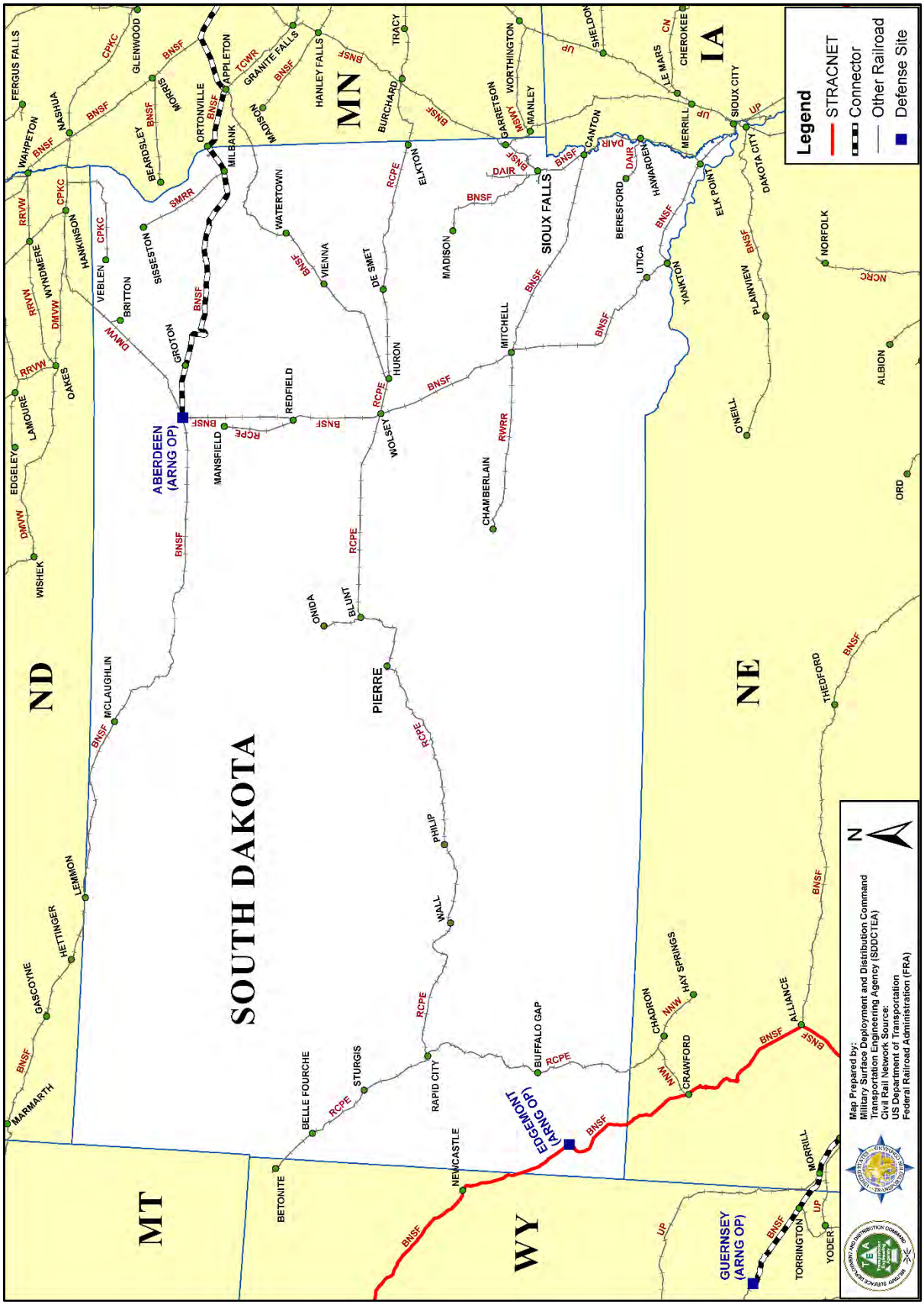


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

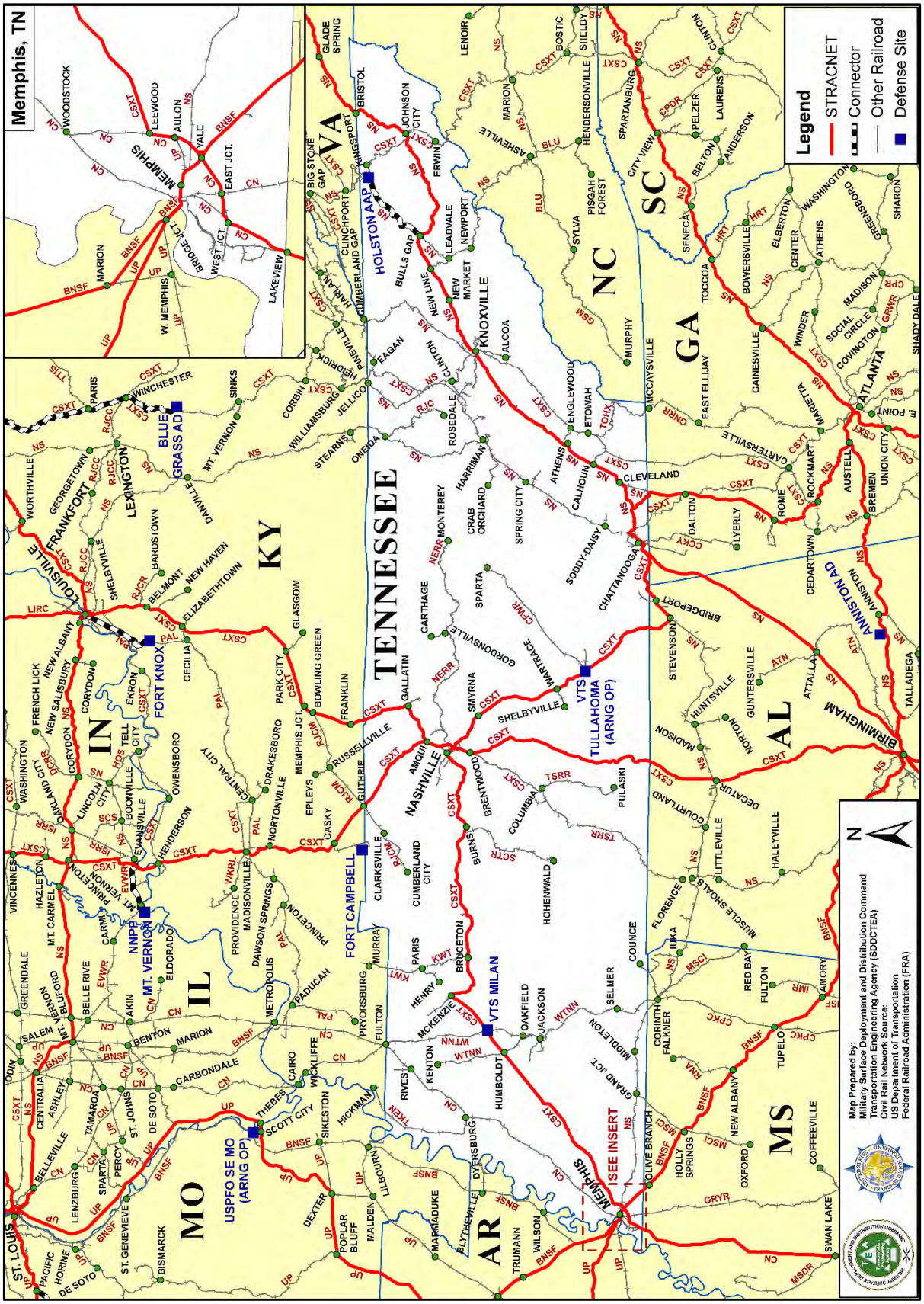
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



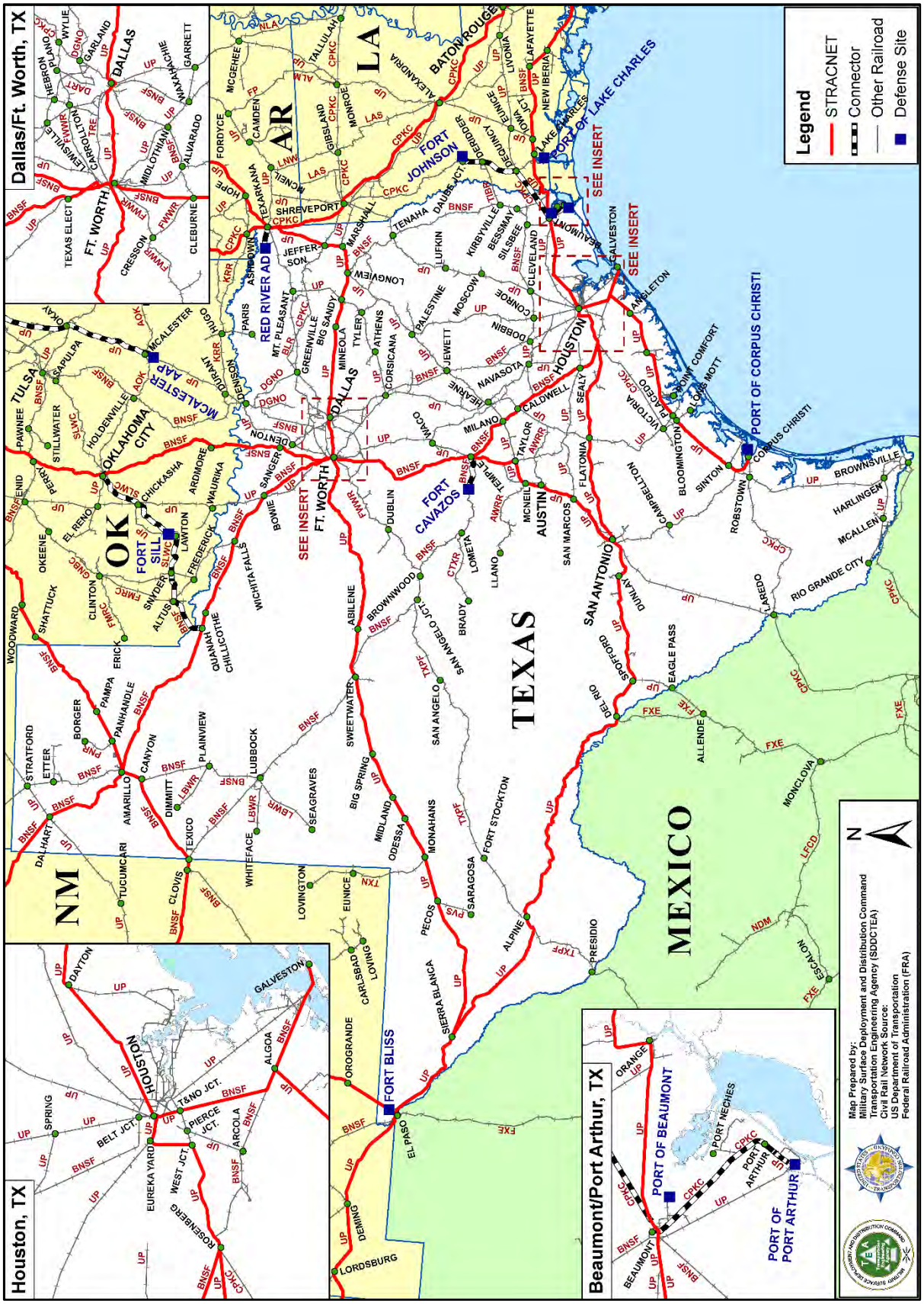
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



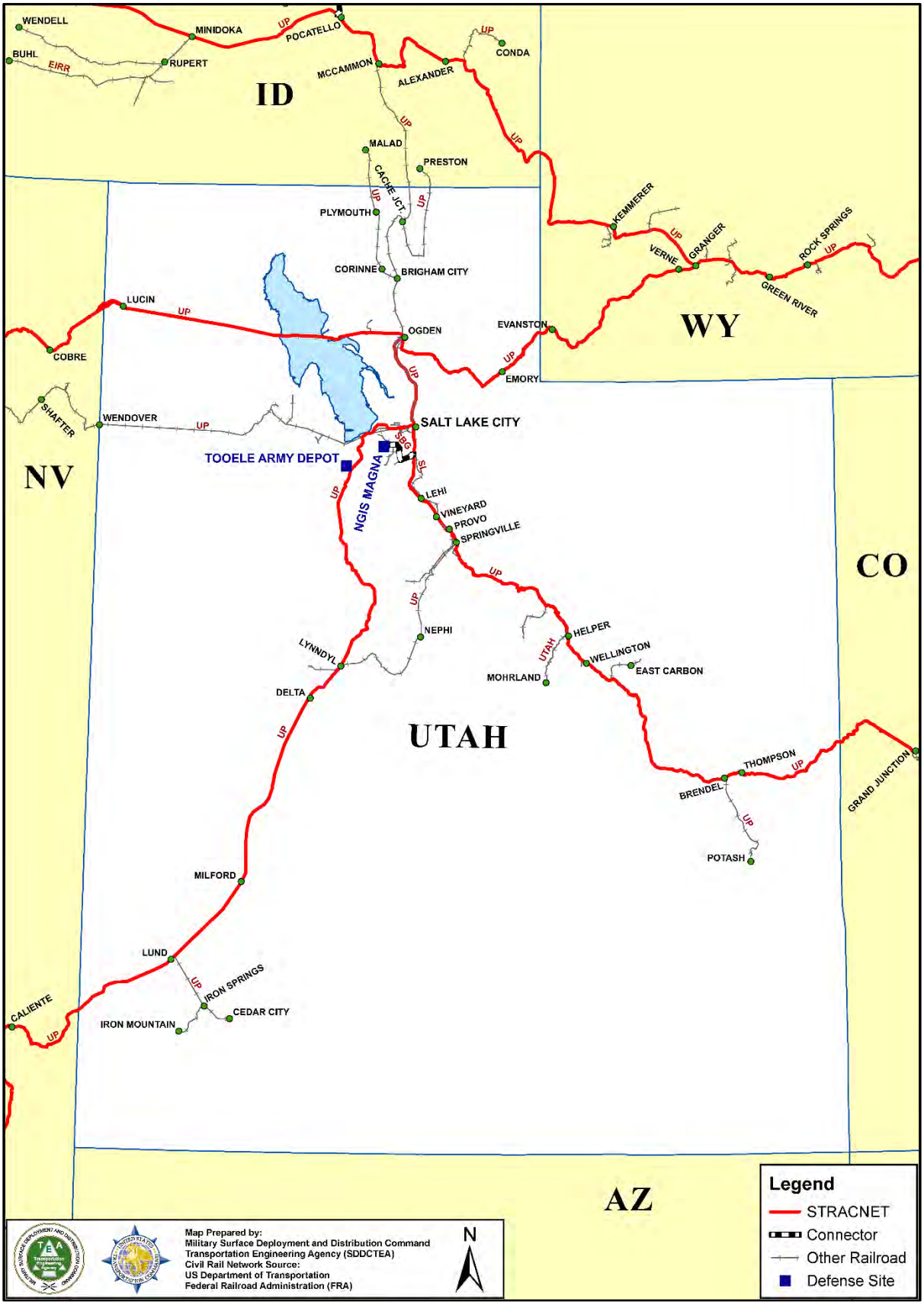
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

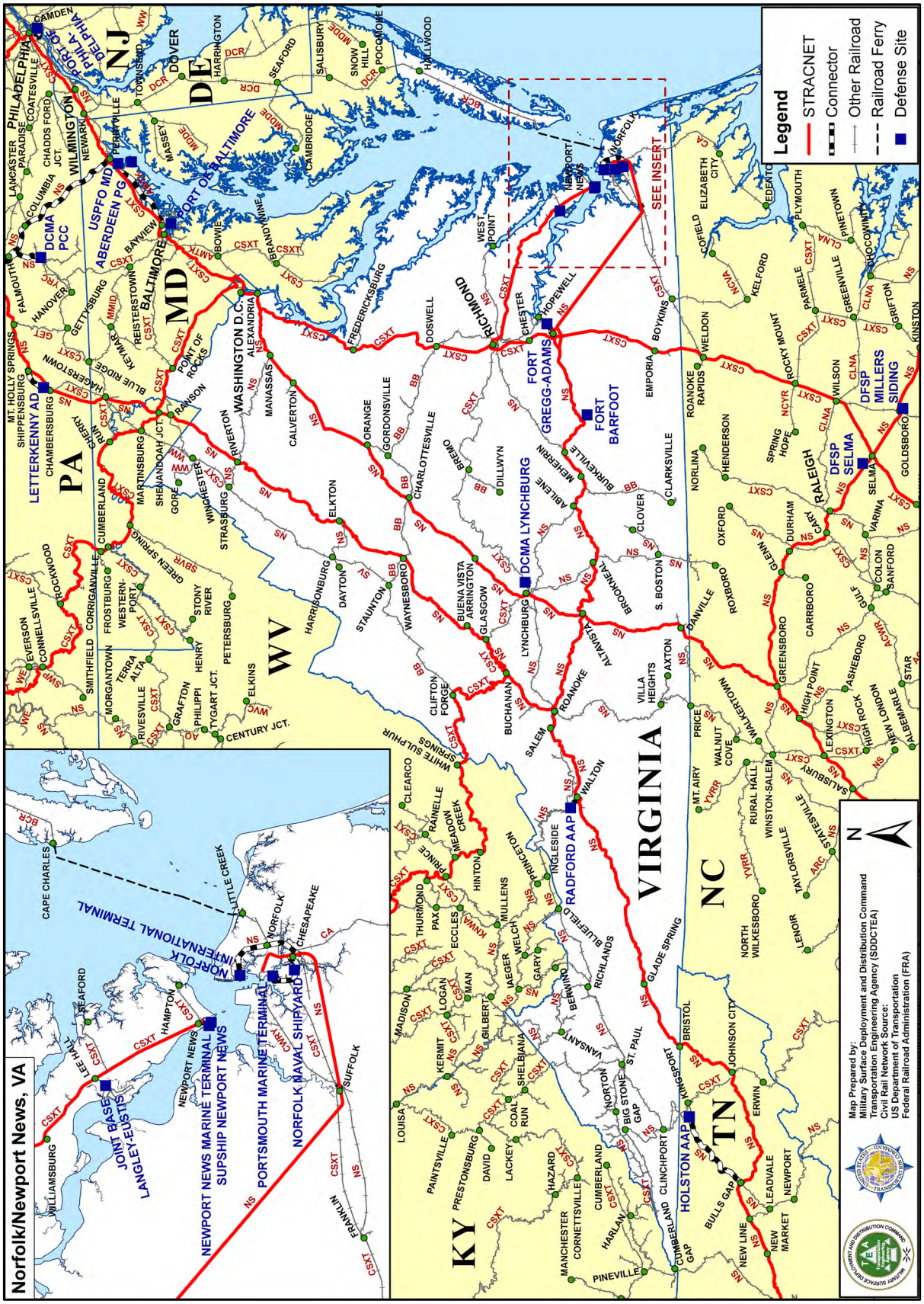


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

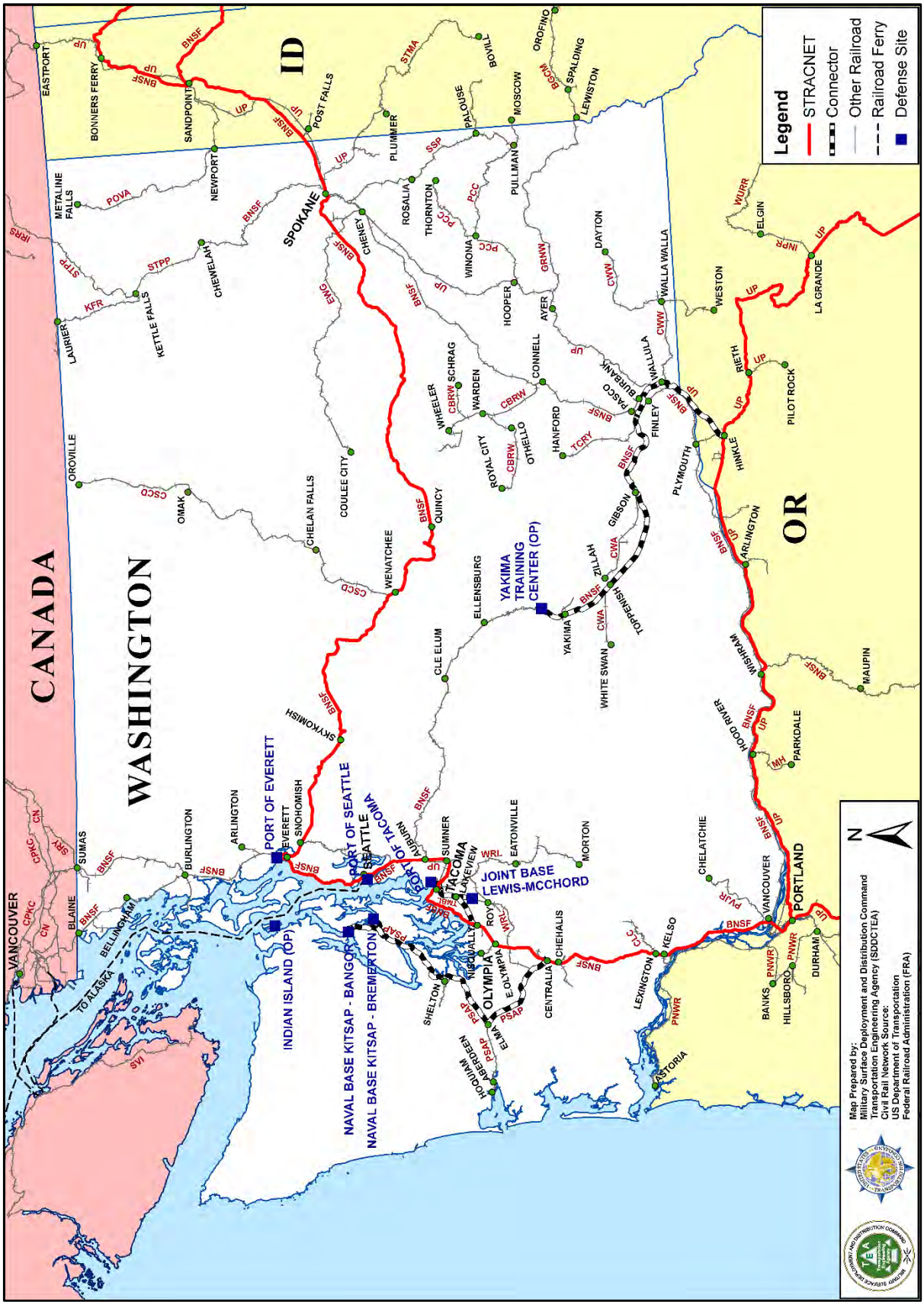


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

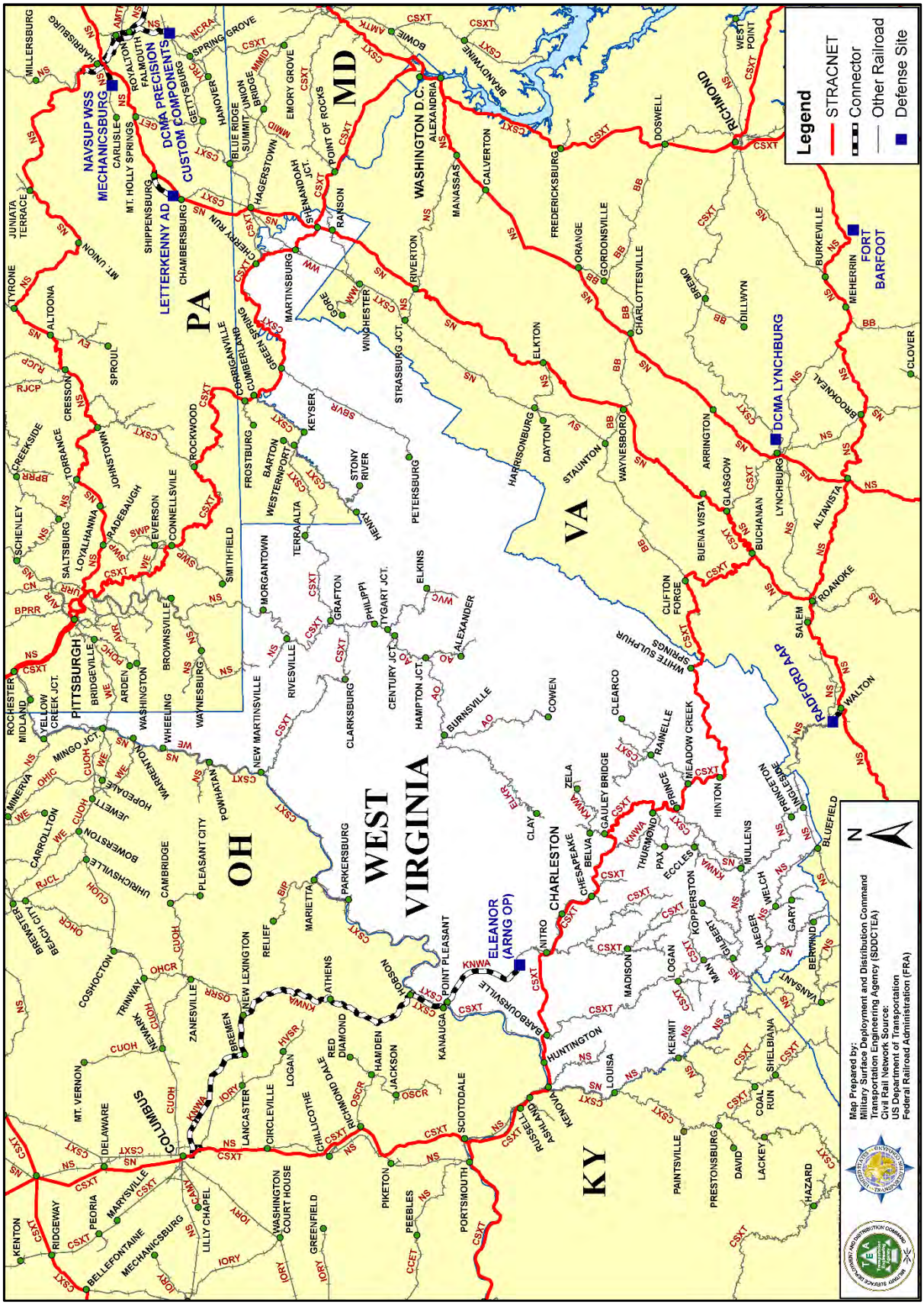
STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

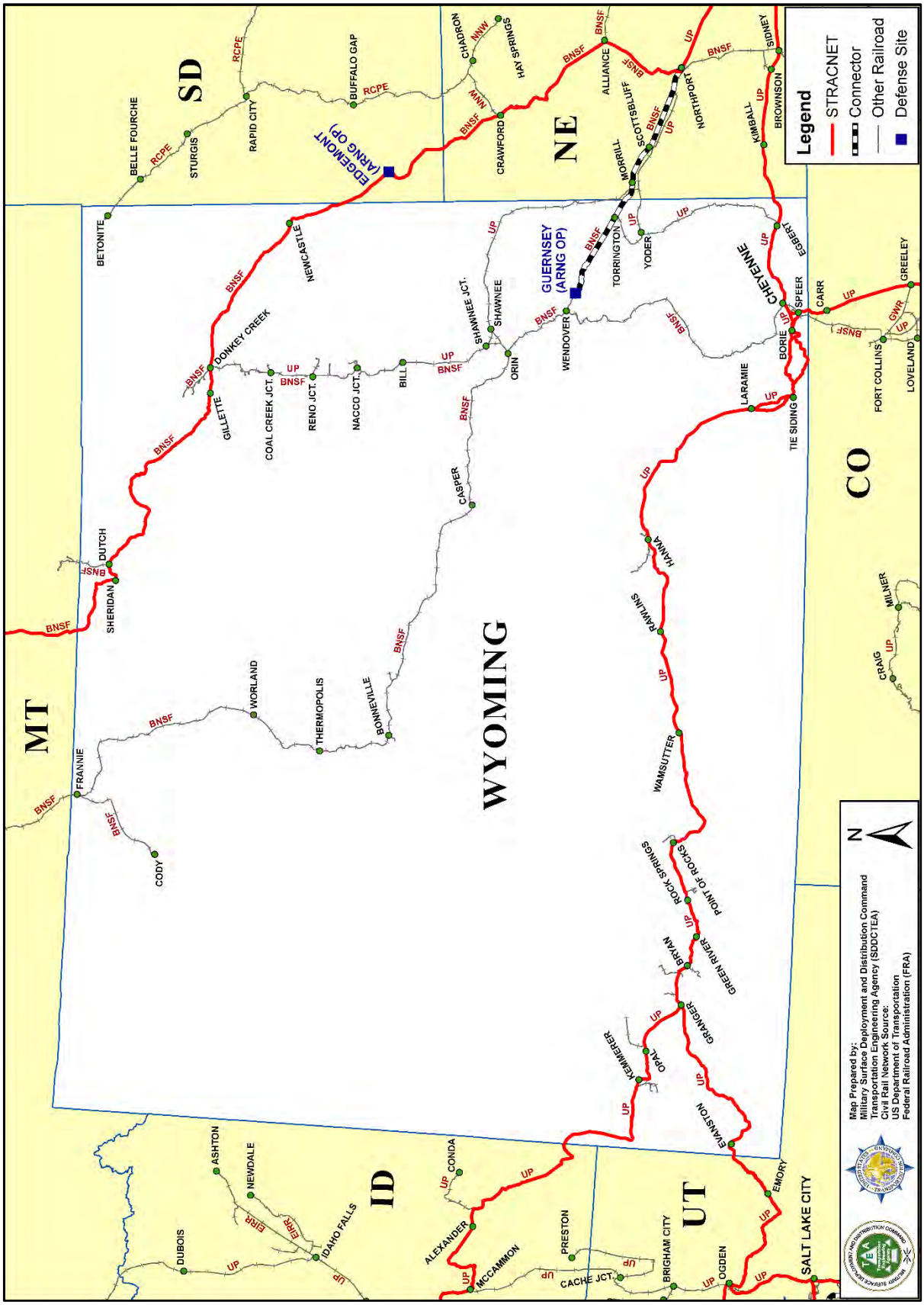


STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES

STRATEGIC RAIL CORRIDOR NETWORK (STRACNET)
and DEFENSE CONNECTOR LINES



APPENDIX B

DEPARTMENT OF DEFENSE INSTALLATIONS AND ACTIVITIES REQUIRING RAIL SERVICE

Appendix B supports Appendix A by providing a tabular list of installations and other locations requiring rail service and identifying the nearby railheads or cities. Each of the Services, as well as the DLA and the DCMA, operate installations and activities where rail service is important to mission accomplishment either in peacetime or mobilization, or both. The Services, DCMA, and DLA have identified 141 installations and activities where rail service is important. These installations and activities are listed in the following table, by State. A key to the installation abbreviations is shown at the end of this appendix.

Some installations, where rail service is required, are actually served by offpost railheads rather than tracks on the installations themselves. These installations are identified by the symbol "OP" for offpost railhead. However, most installations where rail service is important are served by tracks on the installation proper.

ACTIVITY	RAILHEAD
ALABAMA	
Anniston Army Depot (AD)	Bynum
ALASKA	
Eielson Air Force Base (AFB)	Eielson AFB
Joint Base Elmendorf-Richardson (JBER)	JBER
Fort Wainwright	Fort Wainwright
Port of Alaska	Anchorage
Port of Seward	Seward
ARIZONA	
Camp Navajo	Bellemont
MCAS Yuma (OP)	Yuma
ARKANSAS	
Fort Chaffee	Fort Chaffee
Pine Bluff Arsenal	Baldwin
CALIFORNIA	
Beale AFB	Erle
Camp Roberts	McKay
Fort Irwin (OP)	Yermo
Marine Corps Air Ground Combat Center, 29 Palms (OP)	Nebo, Yermo
Marine Corps Logistics Base (MCLB), Barstow	Nebo, Yermo
Marine Corps Base (MCB), Camp Pendleton	Oceanside
Military Ocean Terminal Concord (MOTCO)	Port Chicago
Naval Air Warfare Center Weapons Division (NAWCWD), China Lake (OP)	Spangler
Port Hueneme	Port Hueneme
Port of Long Beach	Long Beach
Port of Los Angeles	Los Angeles
Port of Oakland	Oakland

ACTIVITY	RAILHEAD
CALIFORNIA (Continued)	
Port of Richmond	Richmond
Port of San Diego	San Diego
Sierra AD	Herlong
COLORADO	
Fort Carson	Kelker
Piñon Canyon Maneuver Site (PCMS)	Simpson
CONNECTICUTT	
Camp Hartell	Windsor Locks
Supervisor of Shipbuilding, Conversion and Repair (SUPSHIP) Groton	Groton
DELAWARE	
None	
FLORIDA	
Baldwin (ARNG OP)	Baldwin
USMC Blount Island Command	Blount Island
Naval Ordnance Test Unit (NOTU), Cape Canaveral	Jay Jay
Port Everglades	Port Everglades
Port of Jacksonville	Blount Island
Port of Tampa Bay	Tampa Bay
GEORGIA	
Fort Moore (formerly Fort Benning)	Ochillee, Sand Hill
Fort Stewart	Walthourville
MCLB, Albany	Dosaga
Naval Submarine Base (NSB) Kings Bay	Kings Bay
Port of Savannah	Savannah
HAWAII	
None	

ACTIVITY	RAILHEAD
IDAHO	
Naval Nuclear Laboratory Scoville	Scoville
Orchard Combat Training Center	Orchard
ILLINOIS	
None	
INDIANA	
Camp Atterbury	Edinburg
Crane Army Ammunition Activity (AAA)	Crane
Naval Nuclear Propulsion Program (NNPP) Mount Vernon	Mount Vernon
IOWA	
Des Moines (ARNG OP)	Des Moines
Iowa Army Ammunition Plan (AAP)	Middletown
KANSAS	
Fort Riley	Fort Riley
KENTUCKY	
Blue Grass AD	Fort Estill
Fort Campbell	Casky
Fort Knox	Fort Knox
LOUISIANA	
Fort Johnson (formerly Fort Polk)	Daube Junction
Port of Lake Charles	Lake Charles
Port of New Orleans	New Orleans
MAINE	
Portsmouth Naval Shipyard	Kittery
MASSACHUSETTS	
Camp Edwards	N. Falmouth

ACTIVITY	RAILHEAD
MARYLAND	
Aberdeen Proving Grounds	Aberdeen
Port of Baltimore	Baltimore
United States Property and Fiscal Office (USPFO) Maryland USPFO MD	Havre De Grace
MICHIGAN	
Camp Grayling	Grayling
USPFO Michigan (OP)	Lansing
MINNESOTA	
Camp Ripley	Camp Ripley
MISSISSIPPI	
Camp Shelby	Camp Shelby
Port of Gulfport	Gulfport
MISSOURI	
Fort Leonard Wood	Bundy Junction
MO ARNG Springfield (OP)	Springfield
USPFO MO	Jefferson City
USPFO – Southeast (SE) Missouri Army National Guard (MOARNG) (OP)	Scott City
MONTANA	
Fort Harrison	Helena
Malmstrom AFB	Falls Yard
NEBRASKA	
Hastings (ARNG OP)	Hastings
Lincoln (ARNG OP)	Lincoln
NEVADA	
Hawthorne AD	Churchill/Thorne

ACTIVITY	RAILHEAD
NEW HAMPSHIRE	
Canterbury (ARNG OP)	Canterbury
NEW JERSEY	
Naval Weapons Station (NWS), Earle	Earle
Joint Base McGuire-Dix-Lakehurst (JBMDL) (OP)	Morrisville, PA
Port of New York/New Jersey	Elizabethport, NJ
NEW MEXICO	
None	
NEW YORK	
Fort Drum	Calcium
NNPP Kesselring Site (OP)	Ballston Spa
NORTH CAROLINA	
Defense Fuel Supply Point (DFSP) Millers Siding	Goldsboro
DFSP Selma	Selma
Fort Liberty (formerly Fort Bragg)	Fort Junction
Marine Corps Air Station (MCAS), Cherry Point	Havelock
MCB Camp Lejeune	Havelock
Military Ocean Terminal Sunny Point (MOTSU)	Leland
Port of Morehead City	Morehead City
Port of Wilmington	Wilmington
NORTH DAKOTA	
Fargo (ARNG OP)	Fargo
Grand Forks (ARNG OP)	Grand Forks
Minot (ARNG OP)	Minot
Williston (ARNG OP)	Williston

ACTIVITY	RAILHEAD
OHIO	
Camp James A. Garfield Joint Military Training Center	Ravenna
Joint Systems Manufacturing Center	Lima
NNPP Barberton	Barberton
OKLAHOMA	
Fort Sill	Fort Sill
McAlester AAP	Savanna
OREGON	
None	
PENNSYLVANIA	
DCMA Precision Custom Components	York
Letterkenny AD	Culbertson
Meadville (ARNG OP)	Meadville
NAVSUP Weapon Systems Support (WSS), Mechanicsburg	Mechanicsburg
Port of Philadelphia	Philadelphia
Scranton AAP	Scranton
RHODE ISLAND	
None	
SOUTH CAROLINA	
Fort Jackson (OP)	Columbia
Joint Base Charleston	Inness
Port of Charleston	Charbulk
SOUTH DAKOTA	
Aberdeen (ARNG OP)	Aberdeen
Edgemont (ARNG OP)	Edgemont

ACTIVITY	RAILHEAD
TENNESSEE	
Holston AAP	Holston
VTS - Milan	Milan
VTS - Tullahoma	Tullahoma
TEXAS	
Fort Bliss	El Paso
Fort Cavazos (formerly Fort Hood)	Killeen
Port of Beaumont	Beaumont
Port of Corpus Christi	Corpus Christi
Port of Port Arthur	Port Arthur
Red River AD	Defense
UTAH	
Northrup Grumman Innovation Systems (NGIS) Magna	Magna
Tooele AD	Warner
VERMONT	
Burlington (ARNG OP)	Burlington
VIRGINIA	
DCMA Lynchburg	Mount Athos
Fort Barfoot (formerly Fort Pickett)	Blackstone
Fort Gregg-Adams (formerly Fort Lee)	Petersburg
Joint Base Langley-Eustis (JBLE)	Lee Hall
Newport News Marine Terminal	Newport News
Norfolk International Terminal	Norfolk
Norfolk Naval Shipyard	Portsmouth
Portsmouth Marine Terminal	Portsmouth
Radford AAP	Cowan, Pepper
SUPSHIP Newport News	Newport News

ACTIVITY	RAILHEAD
WASHINGTON	
Indian Island (OP)	Bangor
Joint Base Lewis-McChord (JBLM)	Mobase, Tacoma
Naval Base Kitsap, Bangor	Bangor
Naval Base Kitsap, Bremerton	Bremerton
Port of Everett	Everett
Port of Seattle	Seattle
Port of Tacoma	Tacoma
Yakima Training Center	Pomona
WEST VIRGINIA	
Eleanor (ARNG)	Eleanor
WISCONSIN	
Fort McCoy	Fort McCoy
Joint Program Office (JPO), JLTV, Oshkosh	Oshkosh
WYOMING	
Guernsey (ARNG OP)	Guernsey

Abbreviation Key

AAA	Army Ammunition Activity
AAP	Army Ammunition Plant
AD	Army Depot
AFB	Air Force Base
ARNG	Army National Guard
DFSP	Defense Fuel Supply Point
JLTV	Joint Light Tactical Vehicle
JPO	Joint Program Office
MCAGCC	Marine Corps Air Ground Combat Center
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCLB	Marine Corps Logistics Base
MOTCO	Military Ocean Terminal Concord
MOTSU	Military Ocean Terminal Sunny Point
NAVSUP	Naval Supply Systems Command
NAWCWD	Naval Air Warfare Center Weapons Division
NSB	Naval Submarine Base
NSA	Naval Support Activity
NNPP	Naval Nuclear Propulsion Program
NWS	Naval Weapons Station
OP	Offpost Railhead
SUPSHIP	Supervisor of Shipbuilding, Conversion, and Repair
USPFO	United States Property and Fiscal Office
VTS	Volunteer Training Site

APPENDIX C

DEPARTMENT OF DEFENSE
INSTALLATIONS AND ACTIVITIES
REQUIRING RAIL SERVICE AND
SERVED BY LOW DENSITY BRANCH LINES

ARMY	STATE
Fort Wainwright	AK
Port of Seward	AK
Fort Chaffee	AR
Camp Roberts	CA
Piñon Canyon Maneuver Site (PCMS)	CO
Camp Hartell	CT
Fort Moore (formerly Fort Benning)	GA
Crane Army Ammunition Activity	IN
USPFO MD	MD
Camp Edwards	MA
Camp Grayling	MI
Camp Ripley	MN
Camp Shelby	MS
USPFO - SE (MOANG) (OP)	MO
Hawthorne AD	NV
Canterbury (ARNG OP)	NH
Fort Liberty (formerly Fort Bragg)	NC
MOTSU	NC
Port of Morehead City	NC
Letterkenny AD	PA
Meadville (ARNG)	PA
Fort Jackson (OP)	SC
Eleanor (ARNG)	WV
Joint Base Lewis-McChord	WA
Indian Island	WA
TOTAL 25	

AIR FORCE	STATE
Eielson AFB	AK
Malmstrom AFB	MT
TOTAL 2	

NAVY	STATE
NAWCWD, China Lake (OP)	CA
Port Hueneme	CA
SUPSHIP Groton	CT
NSB Kings Bay	GA
Naval Nuclear Laboratory Scoville	ID
NNPP Mount Vernon	IN
Naval Shipyard, Portsmouth	ME
NWS Earle	NJ
NNPP Kesselring Site	NY
DCMA Precision Custom Components	PA
NAVSUP WSS Mechanicsburg	PA
Naval Base Kitsap, Bangor	WA
Naval Base Kitsap, Bremerton	WA
TOTAL 13	

MARINE CORPS	STATE
MCLB Albany	GA
MCAS Cherry Point	NC
MCB Camp Lejeune	NC
TOTAL 3	

DEFENSE CONTRACT MANAGEMENT AGENCY (DCMA)	STATE
Northrup Grumman Innovation Systems (NGIS) Magna	UT
Joint Program Office, JLTV, Oshkosh	WI
TOTAL 2	

DEFENSE LOGISTICS AGENCY (DLA)	STATE
No installations on low-density rail lines	

Abbreviation Key

AAA	Army Ammunition Activity
AAP	Army Ammunition Plant
AD	Army Depot
AFB	Air Force Base
ARNG	Army National Guard
DCMA	Defense Contract Management Agency
DFSP	Defense Fuel Supply Point
JLTV	Joint Light Tactical Vehicle
JPO	Joint Program Office
MCAGCC	Marine Corp Air Ground Combat Center
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCLB	Marine Corps Logistics Base
MOTSU	Military Ocean Terminal Sunny Point
NAVSUP	Naval Supply Systems Command
NAWCWD	Naval Air Warfare Center Weapons Division
NNPP	Naval Nuclear Propulsion Program
NSB	Naval Submarine Base
NSA	Naval Support Activity
NWS	Naval Weapons Station
OP	Offpost Railhead
SUPSHIP	Supervisor of Shipbuilding, Conversion and Repair
USPFO	United States Property and Fiscal Office

This Page Intentionally Left Blank

Military Surface Deployment and Distribution Command
Transportation Engineering Agency
1 Soldier Way
Scott Air Force Base, Illinois 62225-5006