

A Planning Framework | Our Regional Core System

For many years, the North Central RPO has conducted its transportation planning program based in part on the recognition of a hierarchy of transportation assets and services. For example, since at least the mid-1960s PennDOT has been functionally classifying roadways based on the type of service they provide. Railroads have a similar hierarchy in designating “strategic” versus “tactical” rail lines. And up until the time of Act 44 of 2007, PennDOT organized operators of public transportation service into various classes. (ATA and DuFAST were once considered “Class 4” providers.) Airports also have a similar classification scheme.

Recently, the North Central RPO introduced the regional Core System as a new planning tool to be used in guiding investment. The Core System spatially identifies the region’s highest-priority “links” and “nodes,” or the communities and transportation assets and services that connect them.

The Core System has also been integrated into the RPO’s “Project Prioritization Process” as one criterion for prioritizing candidate transportation projects as draft TIPs and programs are being contemplated.

The Core System concept is being considered by other agencies for use as a planning tool, including PennDOT. In today’s challenging planning environment, the Core System helps the RPO and its partners to be able to leverage the limited funding resources it has available in making difficult programming decisions. By creating a planning tool that seeks to connect the region’s major economic and recreation centers with a multi-modal transportation system, the RPO can ensure that its planning process will ultimately move people and goods in the most efficient way possible.



The Road Ahead | Planning in an era of austerity and uncertainty

The region’s planning program will continue based on the directions identified in the long-range transportation plan. The projects and policies that flow out of our planning program will however be affected by several factors:

Uncertainty at the federal level—The federal surface transportation legislation of MAP-21 provided only a two-year allowance of funding. This lack of a predictable, long-term funding plan makes it difficult to plan according to federal priorities.

Needs overwhelm available resources—In any industry, there will always be a limited amount of resources to balance against needs. The same is true for transportation. Our an-

nual unmet highway and bridge needs alone are in excess of \$153 million of available revenue, according to PennDOT’s Performance Measures Annual Report.

Increasing costs— The increase in costs of raw material such as steel, concrete and liquid asphalt has only exacerbated the limited amount of dollars available for transportation. Simply put, rising costs equals fewer projects. As a result, the projects we fund must offer the best return on our investment possible.

Environmental Regulations — It is unclear how MAP-21 will streamline the environmental review process, particularly as it relates to maintenance projects, which comprise a greater share of our regional program.

“A hundred years after we are gone and forgotten, those who never heard of us will be living with the results of our actions.”

— Oliver Wendell Holmes



North Central RPO Long-Range Transportation Plan

EXECUTIVE
SUMMARY

2040

adopted October 2012

CAMERON | CLEARFIELD | ELK | JEFFERSON | MCKEAN | POTTER

Partnering for Regional Opportunities

A Message from the RPO Chair | Charlotte Dietrich

Dear Fellow Residents:

The past several years have been an extraordinary time for transportation planning. The national recession that officially occurred from December 2007 through June 2009 affected transportation in truly historic ways: regional travel demand declined in the region, affecting liquid fuels funding at the state, county and municipal levels. In response to the struggling economy, the federal government provided Pennsylvania with \$1.2 billion dollars for transportation infrastructure in February 2009. The one-time infusion of money effectively doubled the state's transportation program that year, but funding dropped to its previous level the following year. Moreover, in summer 2010, the federal government denied Pennsylvania's application to toll I-80, which resulted in an additional loss of projected revenue. State transportation funding dropped by \$450 million, affecting road, bridge, and public transportation programs in our region.

There are other signs of concern, as our commercial service airports have been declining in ridership, and growing more dependent on Essential Air Service funding to sustain flights into and out of the region. The Marcellus shale industry—virtually unknown five years ago—has introduced new demands on our roadway networks, particularly on lower-order state roadways and on the local system. North-south mobility, constrained due to our topography, continues to hinder our growth potential.

On a brighter note, the number and severity of vehicle crashes continue to decline throughout our region, and interest in public transportation has rebounded, with both ATA and DuFAST recording gains in ridership. The number of posted and closed bridges, and those rated "structurally deficient," also declined, thanks to PennDOT's bridge rehabilitation and replacement

efforts through its Accelerated Bridge Program, and joint PennDOT/North Central efforts aimed at targeting structurally deficient bridges.

As this plan was being finalized, Congress passed legislation reauthorizing federal surface transportation funding (MAP-21). However, the passage of MAP-21 (Moving Ahead for Progress in the 21st Century) did not provide any major increases in transportation funding, and this funding is guaranteed only through September 2014.

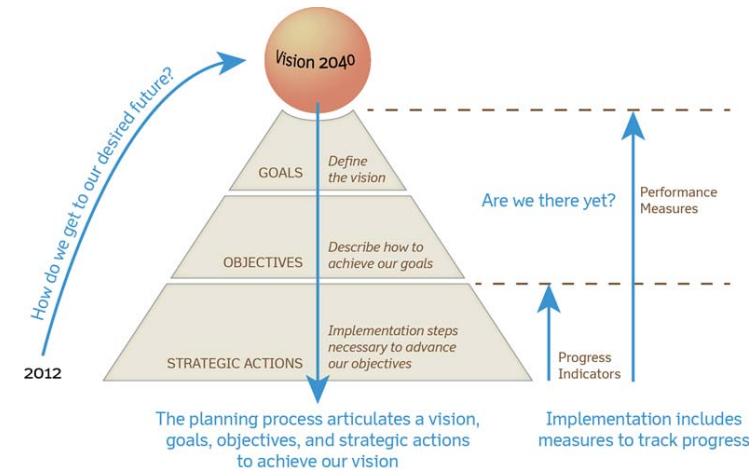
Given this challenging planning environment, the North Central RPO continues to develop and refine its transportation planning program through the addition of qualified staff members and the development of new planning tools, such as a regional core transportation system and a project prioritization process, which will help ensure we are spending our limited transportation infrastructure dollars wisely. We will also continue to work with PennDOT and our partners at the municipal level in streamlining the delivery of projects by providing more detailed environmental information on candidate projects during planning phases. This should ultimately reduce costs and lead to projects being completed more quickly.

The RPO is also now placing a greater emphasis on measuring performance—how effective our projects and programs are at addressing the region's transportation needs over time.

I invite you to read more about the state of our region's transportation infrastructure and what the RPO has proposed moving forward. Please join me and our RPO board members and staff in continuing our efforts to plan for our region's infrastructure in ways that control costs while maximizing results—through innovation, prioritization, and accountability.



How Do We Get There (cont'd.)? | Near- and Long-term Investments



The pyramid above illustrates the plan's basic architecture: the vision provides direction to our goals, objectives, and strategic actions, which are tracked by various performance measures and progress indicators.

The LRTP's financial projections have the region receiving an estimated \$1.49 billion through the year 2040. PennDOT and the North Central RPO have organized this time period into several funding periods, including a 4-year TIP, or Transportation Improvement Program, which is updated every two years. According to RPO projections, it is slated to receive approximately \$166 million over the next four years in state and federal transportation funding. This figure is down significantly from previous TIPs.

North Central's TIP Funding, 2007 to 2013 (\$000s)

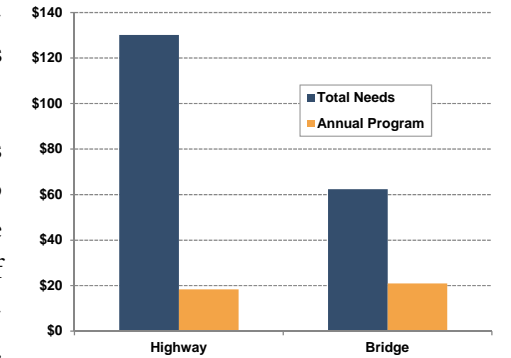
2007-10 TIP	2009-12 TIP	2011-14 TIP	2013-16 TIP
\$187,408	\$212,783	\$207,834	\$166,040

Source: North Central RPO Financial Guidance

While those amounts may seem enormous, they are actually quite small when stacked against the region's total transportation need.

A recent study by the state Transportation Advisory Committee calculated that Pennsylvania suffers from an annual deficit of \$3.5 billion annually for transportation. On a more regional level, recent figures from PennDOT's Performance Measures Annual Report reveals that the North Central region has an annual unmet need of approximately \$112 million for high-

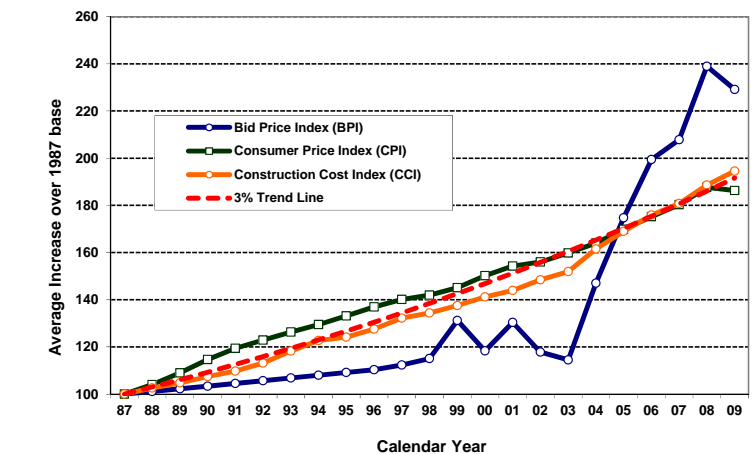
ways and \$41 million for bridges (chart).



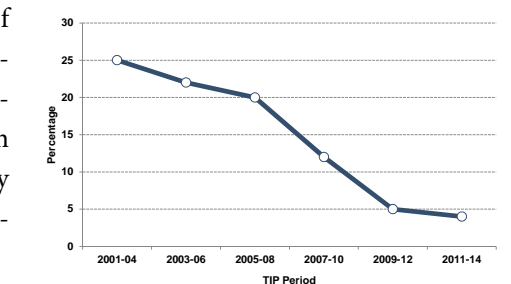
Coupled with this severe funding gap has been the growing cost of delivering transportation projects.

The bid price index for example has experienced increases that far exceed inflation. This is representative of the dramatic increase in raw material costs for such things as concrete, steel, aggregate, and hot mix asphalt that has outpaced inflation.

Increased Cost of Doing Business = Fewer Projects



The increased cost of doing business and loss of buying power translates into fewer transportation projects statewide, and a declining share of funding being directed to new capacity (chart), in favor of highway and bridge maintenance.



More detailed plan information, including the 2040 LRTP's project portfolio, can be found by visiting the North Central PA Commission's website at www.ncentral.com.



How Do We Get There? | Our region's blueprint

Our blueprint for addressing our region's transportation infrastructure begins with an overarching vision statement and supporting goals and objectives. Our plan will also employ the use of performance measures to track how well our action strategies, plans and projects are helping us realize our goals.

Vision Statement: The North Central PA transportation system is an integrated system that offers convenient, efficient, and safe travel choices for both people and goods, while preserving the character and livability of our communities.

Goal	Sample Objectives	Performance Measures
Support Economic Vitality	<ul style="list-style-type: none"> Expand employment opportunities Diversify the region's economic base Promote tourism and resource extraction as regional economic priorities 	<ul style="list-style-type: none"> Change in total employment Jobs generated by transportation investment Number of (TIP) projects enhancing goods movement and logistics Percent of regional employers sampled satisfied with regional transportation system meeting their needs
Improve Safety	<ul style="list-style-type: none"> Reduce the rates of transportation-related fatalities and injuries Expand the use of compatible land use practices in regard to transportation Implement safety initiatives for all transportation modes 	<ul style="list-style-type: none"> Crashes (total, fatal, injury) Number of roadway safety projects implemented Number of roadway safety audits completed Number of educational campaigns (e.g., aggressive driving, drunk driving, red light running) Safety Management Plan implementation
Increase Security	<ul style="list-style-type: none"> Participate in PennDOT District ITS and incident management planning activity 	<ul style="list-style-type: none"> Number of projects improving security (e.g., lighting at park and rides, etc.)
Improve Accessibility and Mobility	<ul style="list-style-type: none"> Expand aviation services, connecting the region to multiple hubs Improve the coordination and efficiency of transit and paratransit systems Mainstream bicycle, pedestrian, and public transportation as part of planning and programming 	<ul style="list-style-type: none"> Public transit ridership (fixed-route and demand responsive) Shipper and carrier satisfaction with regional logistics Commercial air service destinations served Number of projects and dollar value targeted against the regional core system
Protect the Environment	<ul style="list-style-type: none"> Promote the use of alternative modes of transportation Involve public officials to better integrate land use and transportation 	<ul style="list-style-type: none"> Municipal comprehensive plans adopted Number of greenway projects funded Number of municipal access management ordinances Number (and dollar amount) of TE projects
Enhance Connectivity	<ul style="list-style-type: none"> Maintain a regional core transportation system connecting local and regional facilities with the state's system Expand bulk transfer capabilities for rail-truck movements 	<ul style="list-style-type: none"> Number of disconnects or gaps in core system closed Shipper and carrier satisfaction with regional intermodal connections Number of segments completed to regional greenway network
Promote Efficient Management and Operation	<ul style="list-style-type: none"> Expand the use of technology for improved system management 	<ul style="list-style-type: none"> Survey satisfaction with roadway surface quality Mileage of posted and bonded roadways and bridges Number and dollar amount of ITS projects/installations Number of traffic signals with LED and pre-emption
Give Priority to Preservation	<ul style="list-style-type: none"> Address deficiencies in the region's transportation system 	<ul style="list-style-type: none"> Share of TIP allocated to maintenance Road roughness indicators (IRI) Number of state/local bridges posted and closed Average age of ATA and DuFAST fleet

Where We've Been | Background and Overview

North Central's previous long-range transportation plan was adopted in June 2007 and established the region's transportation policy to the year 2035. There have been many pieces of legislation, plans, and events since that time that have

shaped the development of transportation plans and programs throughout the region. Some of these, and their impacts to North Central, are highlighted in the following table.

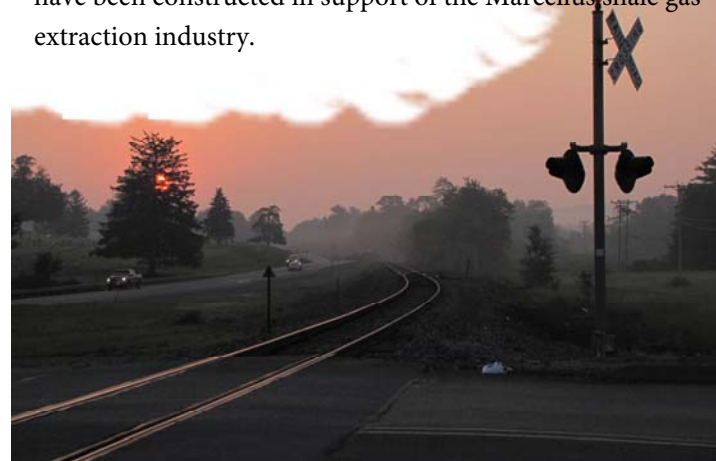
Event	Date	Description
Act 44	July 2007	Pennsylvania's General Assembly passes Act 44, which originally generated up to \$750 million annually in new revenue and allowed for toll proceeds for regional and statewide use.
Accelerated Bridge Program (ABP)	January 2008	PennDOT kicks off implementation of the ABP, which would see an increase in bridge lettings, significantly reducing the state's number of structurally deficient bridges by June 2012 to fewer than 389 in the North Central region and 4,775 statewide.
American Recovery and Reinvestment Act (ARRA)	January 2009	The federal act provided a one-time infusion of more than \$1.2 billion for Pennsylvania transportation projects, including \$47.87 million for the North Central region.
Project Prioritization Process (PPP)	January 2010	The North Central RPO endorses a formal project prioritization process as part of its planning and programming process. The RPO developed the PPP to aid in decision-making. North Central oriented the process around the concurrent development of a regional core transportation system as a regional planning tool.
Regional Greenways Plan	June 2010	NCPRPDC adopts a regional greenways plan, demonstrating a commitment to preserving the region's natural infrastructure in support of recreation and transportation.
FHWA rejects tolling of I-80	July 2010	The federal government's decision to not approve Pennsylvania's application to toll Interstate 80 meant that Act 44 revenue would drop from \$922 million to \$450 million annually, directly impacting highway and transit operations in North Central and statewide.
Safety Corridor Analysis	June 2011	North Central's analysis identified numerous safety concerns, which will be addressed through this plan's investment strategies.
Transportation Funding Advisory Commission (TFAC)	August 2011	The TFAC was created in April 2011 and charged with identifying methods and strategies for bridging the state's transportation funding gap. A complementary study by the state Transportation Advisory Committee had identified an additional \$3.5 billion in new revenue needed to address annual needs for transportation.
Linking Planning and NEPA (LPN)	Fall 2011	With the beginning of the development of the 2013 Program, efforts have been ongoing to improve the program development and project delivery process and link it to our environmental processes and procedures. This effort focuses on ensuring that our most urgent infrastructure needs are addressed first.
Federal Reauthorization	June 2012	The federal surface transportation law known as SAFETEA-LU expired in September 2009. Spending had been maintained by a series of Continuing Resolutions until the passage of successor legislation, MAP-21, in June 2012. Pennsylvania will continue to receive approximately \$1.6 billion in apportionments for highway and bridge projects each year through 2014.

Source: North Central RPO

Where Are We Now? | Statistics that define our existing situation

- Our region is home to nearly 225,000 people who rely on our transportation system for a variety of needs, including journey to work, school, church, shopping, or medical care.
- The demographics of our region overall have been stable, yet our cities and boroughs continue to register population declines. Our population is getting older, decentralized, and more diverse.
- The region has an expansive network of 6,500 miles of roadway to be operated and maintained. Over half of this total (55 percent) is locally owned.
- Daily vehicle miles of travel on the region's highways has been steadily declining in recent years, and in 2010 registered at 7.5 million miles. This is a decline from the 7.8 million recorded during 2003-05.
- Our roadways are becoming safer. Total crashes declined by one-fifth since 2000, from 2,814 in 2000 to 2,244 in 2011.
- The region has a vast inventory of over 1,300 state-owned bridges and 560 county- and locally-owned bridges greater than 8 feet in length. There is no condition data available for the network of local bridges between 8 and 20 feet in length.

- Our region has 126 traffic signals, some of which are not being maintained properly or on a recurring basis, contributing to traffic congestion and safety concerns.
- There has been a rebound of interest in public transportation, as route restructuring and other service improvements have contributed to ridership increases at both ATA and DuFAST.
- Our region's airports have been successful in attracting businesses after making investments in supporting infrastructure.
- PennDOT has posted nearly 1,400 miles of roadway to protect the region's secondary system from freight impacts.
- The region's rail freight operators continue to carry low-value, high-bulk items for regional shippers and receivers such as coal, lumber, and paraffin. New transload facilities have been constructed in support of the Marcellus shale gas extraction industry.



What We Heard | Responses from our regional survey

As part of the LRTP update, the North Central RPO administered a regional survey in spring 2012. From the 215 responses received, the RPO was able to determine public preferences as it related to transportation.

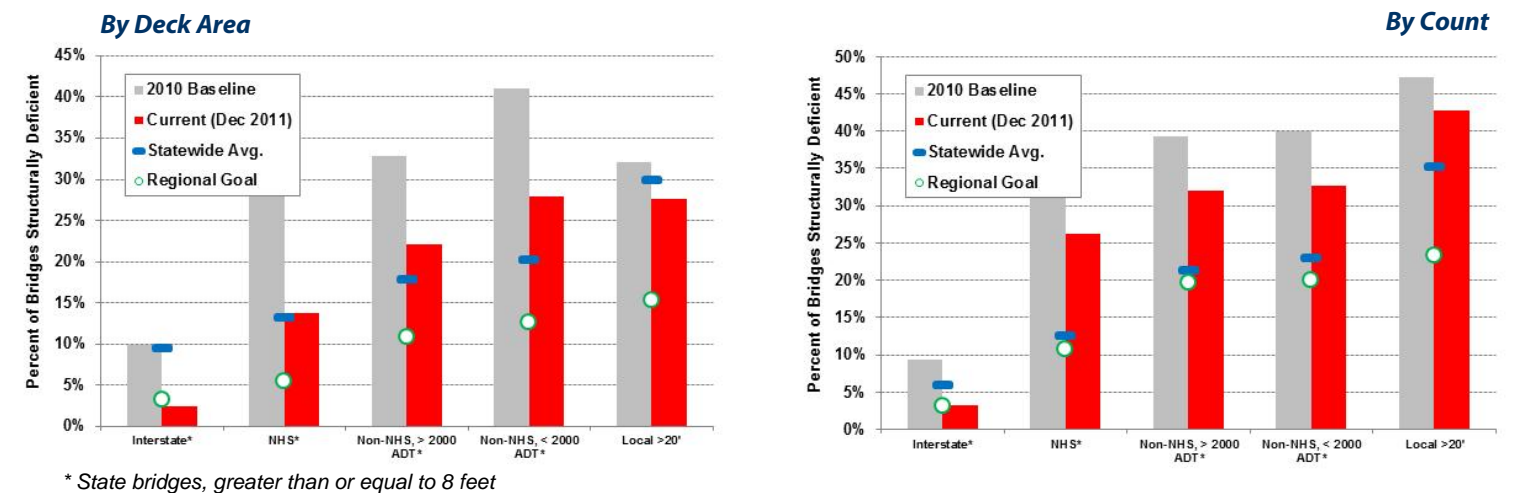
- 78%** Percent saying "Aging and Deteriorating Infrastructure" was the region's top transportation challenge.
- 88%** Percent saying "Safe Routes to School" should be the region's top transportation safety priority.
- 78%** Percent indicating "Improving the region's intermodal freight transfer capabilities" is the top intermodal concern.
- 88%** Percent indicating "expansion of the use of technology in managing traffic control" is "Important," or Very Important."

Where Do We Need to Be? | Performance measurement

The North Central region has an extensive system of transportation infrastructure to plan for. As a continuation of the Asset Planning component of Linking Planning and NEPA, PennDOT has developed performance measure reports for all of Pennsylvania's regional transportation planning agencies, including the North Central RPO. These reports include performance measures for pavements and bridges, and are intended to provide key measures to drive planning and investment decisions in meeting overall asset management strategies. A sample of some of these measures are shown for illustrative purposes and demonstrate the progress that the North Central RPO and PennDOT together have made in reducing total mileage of poor pavements and structurally deficient bridges on the higher-order roadway networks across the region, such as Interstate 80 and other National Highway System (NHS) routes such as US 6, US 119, US 219, and US 322.

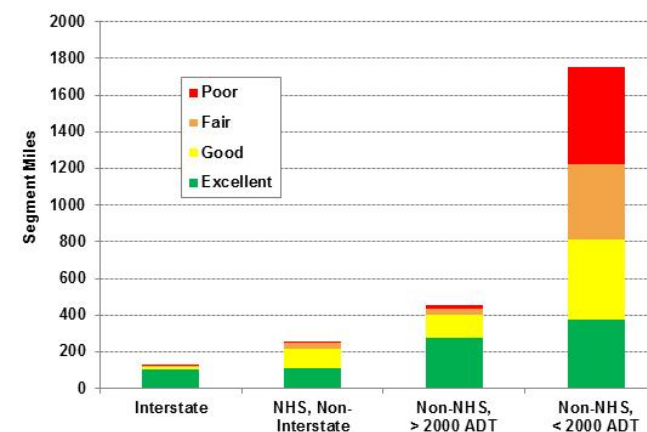
Bridges—PennDOT and the North Central RPO continue to work toward a goal of reducing the number and total deck area of structurally deficient bridges, particularly on higher-order networks such as the interstate and NHS network.

Structurally Deficient Bridges by Business Plan Network



Pavements—PennDOT and the North Central RPO will continue to work toward reducing poor pavements on the highway network. Currently, of the region's 387 miles of NHS, only 12 miles, or 3 percent, is rated as "poor." This demonstrates the progress that has been achieved in addressing deficiencies on higher-order roadway networks, which carry the most people and freight.

Segment Miles by Business Plan Network with International Roughness Index (IRI) Ratings



Surface Out-of-Cycle Segment Miles by Business Plan Network with Overall Pavement Index (OPI) Ratings

