

The **INSTITUTE** for
Public Policy & Economic Development

*A partnership between Keystone College, King's College, Luzerne County Community College,
Marywood University, Misericordia University, Penn State Wilkes-Barre,
The Commonwealth Medical College, University of Scranton, & Wilkes University*

2011 Task Force Policy Statements

May 2011



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**A special thanks to the supporters of the Indicators
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2011 Task Force Panel Discussions

Mohegan Sun at Pocono Down
Wilkes- Barre, PA
May 19th, 2011

Moderator: Bobby Soper, CEO, Mohegan Sun Arena

9:15 – 9:45 Health & Health Care Panel Discussion

9:45 – 10:30 Education & Workforce Development and Economic Development
Joint Panel Discussion

10:30 – 10:45 Break

10:45 – 11:15 Planning, Land Use, Transportation and Infrastructure Panel Discussion

11:15 – 11:55 Housing Panel Discussion

11:55 – 12:00 Closing Remarks and Adjournment

2011 Indicators Report & Forum Task Force Panel Participants

Health & Health Care Task Force

Chair: Karen Murphy, PhD, President, Moses Taylor Hospital

Panelist: Cornelio Catena, CEO, Wilkes-Barre General Hospital

Panelist: Susan Sordoni, MD, Physician

Housing Task Force

Chair: Charlie Kasko, Vice President, Signature Building Systems
Represented by Jesse Ergott, Executive Director of Neighborhood Housing
Services of Lackawanna County (NHS)

Panelist: Ron Piccolotti, President, Pride Builder's Incorporated

Panelist: Steven Farrell, Owner, Classic Properties

Panelist: Liz Hersch, Executive Director, Housing Alliance of PA

Education & Workforce Development Task Force

Jobs, Economy & Economic Development Task Force

Chair: Tim Gilmour, President, Wilkes University

Co-Chair: Chris Haran, COO, TMG Health

Panelist: Nancy Tkatch, Superintendent, NW Area School District

Panelist: Teri Ooms, Executive Director, The Institute for Public
Policy & Economic Development

PLuTI Task Force

Chair: Tom Lawson, P.E., Co-founder, Borton-Lawson

Panelist: Nancy Snee, Senior Planner, Luzerne County Planning Commission

Panelist: Ellen Ferretti, Northeast Region Vice President,
Pennsylvania Environmental Council

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Bi-county Comprehensive Plan Policy Statement

Introduction

The Institute for Public Policy & Economic Development has created a policy statement on the Bi-County Comprehensive Plan (the “Plan”). The Plan will be a joint undertaking between Lackawanna and Luzerne Counties, which involves key issues affecting county residents. Two of the most pressing issues facing the bi-county region are transportation and land use.

Findings

Deteriorating Transportation Conditions

Lackawanna and Luzerne Counties face significant problems related to the deteriorating condition of the region’s transportation infrastructure, including roadways and bridges. According to The Road Information Program (TRIP), a Washington, DC, based non-profit research group, Northeastern Pennsylvania ranks poorly in terms of its local roadways. In addition, a recent study reveals that 69 percent of major roadways in the Scranton/Wilkes-Barre area are rated in poor or mediocre condition. The study also indicates that only 13 percent of roads are rated in good condition. The region’s bridges do not fair better, with 39 percent rated as either structurally deficient or functionally obsolete. Many roadways and bridges are decades-old and are nearing the end of their useful life. Budget constraints, increased costs and decreasing revenue challenge transportation planners.

Commuter Rail

At present, the Wilkes-Barre/Scranton area lacks passenger rail service. In 2010, a study was proposed in the Pennsylvania State Senate to examine the feasibility of commuter rail service between Wilkes-Barre and Scranton. The study would also examine a rail link between the region and New York City via Hoboken, NJ. The benefits of such a link are numerous and include, among others, increased tourism, which could have a direct economic benefit to local businesses, reduced work and recreation commute/travel times, alleviated road congestion and less infrastructure corrosion.

Land Use

Sprawl, which is the movement of businesses and residents away from city centers, is a significant issue the region faces.

Many factors contribute to the increased sprawl, including a lack of zoning law uniformity and a community’s dependence on property taxes as a means of funding safety and other public services. In turn, this leads communities to encourage zoning for large commercial and/or residential projects, as such, development results in increased tax revenue, regardless of

whether it fits well into a community. Sprawl can have many negative effects on a region. Farmland, forests, and wetlands are just a few of the natural environments that are irreversibly destroyed to make way for large development projects. Resulting environmental impacts include flooding and a loss of natural habitats for wildlife.

Lack of Uniform Zoning Laws

Since Lackawanna and Luzerne Counties lack uniform zoning laws, local municipalities or towns make decisions on residential and commercial land use zoning and the scope of zoning laws. The lack of uniform zoning ordinances across a region often complicates efforts to establish better land use practices and preservation.

Issues

A region's transportation infrastructure and links are economic lifelines that connect the region to the outside world. Without these vital links, local economies and quality of life suffers. The maintenance and development of the region's transportation links will strengthen the local economy and help improve the quality of life due to increased safety and lower vehicle maintenance costs.

According to one study, savings from using public transportation as a principal transportation mode can amount to nearly \$10,000 in any one county. The Plan discusses the bus rapid transit system, which is a step in the right direction toward providing commuters with options for commuting between various recreation, shopping, and employment districts.

Transportation issues transcend communal boundaries. They do not stop at a designated line on a map or a marker on the side of the road. Therefore, it is necessary to work towards a commonality and better coordination of limited resources to make sure the region's transportation infrastructure meets the current and future needs.

In order for communities to function in a proper manner, effective land use policies must be presenting place. Land use policies bring order out of chaos in terms of development and land preservation. In other words, they are essential in providing guidelines for how development and preservation are carried out. Without effective land use policies, development and preservation goals become more difficult to achieve.

Land use issues, including sprawl and zoning laws, affect not just the individual communities, but the entire bi-county region. While the consequences of sprawl including destruction of environmental habitats may appear to be local, they have a trickle down impact on almost everyone. An example is the increased amount of water runoff that occurs because of paved surfaces as opposed to undeveloped land.

Policy Guidelines

Support regional transportation planning to meet current and future transportation needs. Such planning will result in better utilization of existing resources and, in the future, expand the region's transportation links. Regional land use planning proposals must be adopted by Luzerne and Lackawanna Counties to meet the current and future development and preservation goals. Other land use issues may be brought to the forefront should the need arise.

Communities in the bi-county region must buy into and support the Plan since it is a collaboration opportunity for the interconnected counties, which will allow more common objectives to be realized.

Regional Plan Outcomes

The regional transportation portion of the Plan should seek to:

- Document the cost of resources needed to maintain the existing transportation infrastructure through regular maintenance. This is especially relevant for the Interstate 81 corridor.
- Report safety needs along with recommended improvements and the associated costs of such improvements.
- Expand the mass transit system to reduce reliance on the interstate system for short distance commutes as well as single occupied vehicles; investigate impacts that a rail system from New York City would have on the region.
- Create strategies to improve the transportation capacity of the system in place.
- Evaluate proposed projects and come up with innovative strategies to help fund such projects.

The land use portion of the Plan should see to:

- Develop innovative strategies to promote development of downtown areas and attract interested developers.
- Investigate the possibility of changing current zoning laws to decrease sprawl outside of the community proper.
- Come up with ways to create uniform zoning laws to attract future development.
- Examine ways other than property taxes to fully or partly fund vital community services,

such as schools.

- Offer incentives to businesses and developers who choose to locate within the community proper limits.
- Create incentives for sustainable development and encourage such practices.
- Focus environmental protection laws on preservation of natural resources.

Policy Statements

Transportation

The Institute for Public Policy and Economic Development supports planning policies that result in a safe and reliable transportation system that will form the backbone of the regional economy; this includes multimodal forms of transportation such as car, bus, and passenger and freight rail.

The Institute for Public Policy and Economic Development supports planning policies that improve the quality of the existing transportation system, while simultaneously efficiently expanding the infrastructure in anticipation of future needs.

The Institute for Public Policy and Economic Development supports planning policies that encourage cooperation among municipalities and agencies, both in the sharing of resources and of ideas; doing so would help increase efficiency and reduce the amount of time and effort required to make such plans a reality.

The Institute for Public Policy and Economic Development supports initiatives and programs that help the transportation infrastructure meet the needs of a 21st century populace. This includes research into the viability of alternative forms of transportation including rail, bus rapid transit, and Intelligent Transportation Systems (ITS).

Land Use

The Institute for Public Policy and Economic Development supports planning policies that result in sustainable development and environmental protection.

The Institute for Public Policy and Economic Development supports planning policies that create incentives for developers to adopt environmentally sound practices. This includes green buildings and development in the traditional business districts.

The Institute for Public Policy and Economic Development supports planning policies that combat sprawl by offering incentives for development within the core communities.

The Institute for Public Policy and Economic Development supports planning policies that encourage cooperation among communities and agencies regarding land use issues. Accomplishing this task will make the implementation of plans, including those previously discussed, easier to achieve.

The Institute for Public Policy and Economic Development supports planning policies that will lead to a uniform regional zoning code. This proposal will make future development a more streamlined process.

Policy Position

All stakeholders throughout the bi-county region must support the goal of providing and maintaining a safe and efficient transportation infrastructure that serves the needs of the populace. The Institute for Public Policy & Economic Development supports regional stakeholders working toward the development of policies and programs that strive to accomplish these goals. Fact-finding studies are needed to determine how much such maintenance and development programs will cost. In addition, perhaps even more important than figuring out costs, is the transfer of policy from the written stage to the implementation stage. This means that planners should come together to create innovative ways to implement these ideas.

Similarly, regional stakeholders in the bi-county region must support the goal of developing and implementing effective and reasonable land use policies that serve a dual purpose - the protection and preservation of our valuable natural habitats and undeveloped areas, and encouragement of future development to include sustainable commercial and residential projects. To accomplish this, additional planning and impact studies are needed.

The Road Information Program. (2010). Retrieved from http://www.tripnet.org/state/PA_Scranton_Wilkes-Barre_PR_112310.pdf

Williams, Mantill. (2010). Riding Public Transit Saves Individuals \$9,293 Annually; Cost per gallon of gas increases 13 cents since last month. Retrieved March 18, 2011, from http://www.publictransportation.org/facts/100406_transit_savings.asp

Regional Health Care Delivery System Policy Statement

Introduction

Lackawanna and Luzerne Counties' health care delivery system is challenged. Publicly available statistics indicate that the northeast region's hospitals collectively posted over \$40 million in losses in 2009. Poor financial performance is compounded by an increasing number of residents seeing medical care elsewhere. In March 2010, the Patient Affordable and Accountable Care Act was enacted and calls for sweeping health care delivery system reform to include significant decreases in Medicare reimbursements. The purpose of this narrative is to provide detail on the health care delivery system's challenges, identify several reforms included in the Accountable Care Act and present a research study that will support health care system change within our community.

Findings

Regional Health System Financial Performance

According to a report on hospital financial performance published by the Pennsylvania Health Care Cost Containment Council entitled, *Financial Analysis 2009*, seven out of the nine hospitals in Lackawanna and Luzerne Counties had negative net operating income, reflecting a collective loss of \$41.6 million. Continued negative margins result in the inability to access and invest capital necessary to operate as high performing organizations.

Outmigration of Health Care Services

The outmigration of health care services leaving the region is negatively impacting the economic well being of the health care delivery systems. It has been estimated that the region faces a loss of approximately \$1 billion annually from those who seek care elsewhere. The Pennsylvania Health Care Cost Containment Council reported that in 2009, over \$200 million in hospital revenue was generated by Lackawanna County residents traveling outside the community for services. Absent significant changes in the local delivery system, the magnitude and impact of the outmigration of local health care services will increase. This results in a loss of revenue to area hospitals, which further impacts the region's negative operating performance.

Accountable Care Act

Following are some of the most significant delivery system reforms included in the Accountable Care Act, which will be implemented between 2010 and 2015. Such reforms do not reflect the total financial impact to hospitals as a result of the Affordable Care Act.

Delivery System Reforms

- Reduces Medicare payments to the hospitals by no more than 1% in 2013, 2% in 2014, and 3% in 2015 and subsequent years. Additional reductions in payments will be incurred to account for preventable hospital readmissions beginning October 1, 2012. Reductions do not apply to critical access hospitals. The legislation also calls for the establishment of a quality improvement program to assist eligible hospitals in improving readmission rates.
- Institutes a Medicare Value Based Payment Program that ties Medicare reimbursement to hospitals on quality performance.
- Reduces Medicare payments to hospitals for hospital-acquired conditions by 1%, beginning 2015.
- While the final legislation is pending, language in the Affordable Care Act allows qualifying providers organized as Accountable Care Organizations (ACOs) that meet quality thresholds to share in the cost savings they achieve for the Medicare program beginning in 2012. To qualify as an ACO, organizations must agree (in a 3-year contract with the Secretary) to be accountable for the overall care of their Medicare beneficiaries, have adequate participation of primary care physicians, define processes to promote evidence-based medicine, report on quality and costs, and coordinate care. If an ACO achieves a minimum level of savings, the ACO will receive a share of the savings.
- Creates the Center for Medicare and Medicaid Innovations (CMI) to test, evaluate, and expand in Medicare, Medicaid, and Pennsylvania's Children's Health Insurance Program (CHIP) different payment structures and methodologies to reduce program expenditures, while maintaining or improving quality of care, to be established by January 1, 2011.
- Payment reform models that improve quality and reduce the rate of cost increases could be expanded nationally throughout Medicare, Medicaid and CHIP. Provides 20 possible models for pilot testing, including allowing states to test and evaluate fully integrating care for dual eligible individuals. Authorizes the Secretary to limit model testing to certain geographic areas.
- Establishes a national Medicare pilot program to develop and evaluate paying a bundled payment under traditional fee-for-service Medicare for acute, inpatient hospital services, physician services, outpatient hospital services, and post-acute care services for an episode of care that begins three days prior to a hospitalization and spans 30 days following discharge. Requires the Secretary to expand the pilot program if it achieves stated goals of improving or not reducing quality and reducing spending. Requires the Secretary to test a continuing care hospital model. Requires the pilot programs to be established by January 1, 2013 and expanded, if appropriate, by January 1, 2016.

Projected Economic Impact of Health Reform

(In thousands)

FY 2009	2009 Net Patient Revenue	Medicare Portion of NPR	Medicare Portion of Net Patient Revenues	Health Care Reform Cut in 2012	New Net Patient Revenue	Revised Operating Income	Existing Operating Income
Community/Scranton	\$159,129	28%	\$44,540	\$445	\$158,684	-\$5,219	-\$4,774
Geisinger WB	\$44,868	37%	\$16,610	\$166	\$44,702	-\$25,407	-\$25,241
Geisinger Wyoming Valley	\$221,648	41%	\$91,629	\$916	\$220,732	-\$8,377	-\$7,461
Hazleton General	\$93,232	42%	\$39,465	\$395	\$92,837	-\$582	-\$187
Marian Community	\$33,012	50%	\$16,552	\$166	\$32,846	-\$1,916	-\$1,750
Mercy/Scranton	\$146,387	54%	\$79,049	\$790	\$145,597	\$3,323	\$4,113
Mid-Valley	\$13,556	68%	\$9,242	\$92	\$13,464	\$972	\$1,064
Moses Taylor	\$139,611	39%	\$54,504	\$545	\$139,066	-\$1,376	-\$831
WVHCS	\$113,598	48%	\$54,220	\$542	\$113,056	-\$7,152	-\$6,610
	\$965,041		\$405,813	\$4,058	\$960,983	-\$45,735	-\$41,677

Source: Pennsylvania Health Care Cost Containment Council

Fiscal year 2009 hospital financial data was secured from the Pennsylvania Health Care Cost Containment Council to analyze the loss of Medicare Reimbursements from Net Patient Revenue (NPR) and its impact on net income and subsequent economic impact on the region.

The decrease of 1% in Medicare reimbursements for 2013 would have the effect of reducing NPR by \$4 million throughout the nine regional hospitals. The percentage cuts are expected to increase through 2015. In FY 2009, seven of nine area hospitals posted negative net operating income, reflecting a collective loss of \$41.6 million. The changes in reimbursements included in the Affordable Care Act would add another \$4 million to the loss.

On top of the direct loss, an economic modeling system that measures the impact of change on a local economy and shows the indirect and induced effects demonstrates that in 2013, Lackawanna County could see an additional \$.5 million loss ripple through its economy, while Luzerne County could see an additional \$3.6 million loss.

The assumptions do not take into consideration additional cuts to hospital revenues that reduces annual market basket updates for inpatient and outpatient hospital services (\$15 million over the next three years as projected by the Hospital Association of Pennsylvania), the reduction in Medicare Disproportionate Share Hospital (DSH) payments to 25% of the amount that otherwise would be made beginning in FY 2014, and any additional payment to reflect uncompensated care costs, bonus payments based on increased quality or reductions in readmissions or hospital infections (1% in 2015). There is a potential for mitigation of loss through the achievement of quality bonuses for hospitals. However the amount received into the bonuses will not be equal to or exceed decreases in reimbursements from market basket adjustments. Further, the cuts do not take into account the reduction due to the wage index

cuts. Since those direct cuts are not included in hospital losses we demonstrate, we also don't show the indirect and induced losses that will occur in conjunction with the additional cuts.

Broader Economic Impact

Given the current business models of area hospitals, the impact of the reduction in Medicare reimbursements has the potential to significantly impact their ability to continue to deliver high quality care, and potentially result in the loss of access to specialty care, less hospital beds per capita, higher unemployment and less economic impact regionally.

Regional economic impact suffers as the result of the "Ripple Effect" of the declining performance in health care. Each county potentially stands to lose an additional \$4 million or more as a result of the lost revenue to the hospitals. Essentially, as the hospitals lose revenue, they tend to decrease the size of their business, which results in lower purchasing and unemployment rates. This, in turn, affects jobs and earnings in other sectors.

Lackawanna and Luzerne Counties are dependent on health care employment as an economic driver. According to the 2007 Economic Census, health care and social assistance (NAICS 61) is the largest industry employer in Lackawanna County and the second largest in Luzerne County.

Health Care and Social Assistance Organizations

	Number of Establishments	Revenue	Payroll	Employees	Non Employee Establishments	Non Employee Revenue
<i>in thousands</i>						
Lackawanna County	708	\$ 1,560,485	\$ 118,212	18,457	847	\$ 27,325
Luzerne County	983	\$ 1,986,639	\$ 809,921	23,418	1311	\$ 55,246

2007 US Economic Census

Additionally, with Baby Boomers beginning to turn 65 this year, additional individuals will go into the Medicare system. This will continue for the next eighteen years, as members of the generation continue to turn 65. The impact on hospitals will be an increase of services provided to Medicare beneficiaries at a considerably lower rate.

Therefore, based on the already unsustainable health care delivery models, our local health care industry must find a solution that will provide access to capital, increase the quality of and access to services, and increase cost efficiencies. Opportunities to partner with The Commonwealth Medical College should also be examined. Building a well capitalized, high quality health care delivery system will reduce the need for patients to seek care at hospitals outside the region. As demonstrated above, mitigation of outmigration for patient services could potentially result in millions in local health care services locally, which, in turn, fuels money into other local sectors, which results in more jobs and greater earnings.

Proposed Study

In consideration of the current status of the health care delivery system in Lackawanna and Luzerne Counties, the potential impact of the Affordable Care Act, and the possibility of increasing the region's economic well being, The Institute for Public Policy and Economic Development's Health and Health Care Task Force would like to conduct a patient survey to assess attitudes and perceptions of regional health care. The study's purpose will be to gather community perspectives on the dimensions of quality and access of physicians and hospitals in the region. The results will provide important insights as the community begins to move forward to design a high performing health care delivery system.

Policy Position

All stakeholders throughout the bi-county region must support the goal of providing and maintaining an innovative and comprehensive system of health care. The Institute for Public Policy & Economic Development supports regional stakeholders working toward the development of policies and programs that strive to accomplish these goals. Fact-finding studies are needed to determine how much such a reformed delivery system with collaborative partnerships could work.

Appendix

Regional Multipliers

...from the Regional Input-Output Modeling System (RIMS II): A Brief Description

Overview

Effective planning for public- and private-sector projects and programs at state and local levels requires a systematic analysis of the economic impacts of these projects and programs on affected regions. In turn, systematic analysis of economic impacts must account for the inter-industry relationships within regions because such relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting a regional economic impact analysis.

In the 1970's, the Bureau of Economic Analysis (BEA) developed a method for estimating regional I-O multipliers, known as RIMS (Regional Industrial Multiplier System), which was based on the work of Garnick and Drake. In the 1980's, BEA completed an enhancement of RIMS, known as RIMS II (Regional Input-Output Modeling System), and in 1992, BEA published a second edition of the handbook, in which the multipliers were based on more recent data and improved methodology.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.

BEA's RIMS multipliers can be a cost-effective way for analysts to estimate the economic impacts of changes in a regional economy. However, it is important to keep in mind that, like all economic impact models, RIMS provides approximate order-of-magnitude estimates of impacts. RIMS multipliers are best suited for estimating the impacts of small changes on a regional economy.

To effectively use the multipliers for impact analysis, users must provide geographically and

industrially detailed information on the initial changes in output, earnings, or employment that are associated with the project or program under study. The multipliers can then be used to estimate the total impact of the project or program on regional output, earnings, and employment.

RIMS II is widely used in both the public and private sector. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private-sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.

RIMS II Methodology

RIMS II uses BEA's benchmark and annual I-O tables for the nation. Since a particular region may not contain all the industries found at the national level, some direct input requirements cannot be supplied by that region's industries. Input requirements that are not produced in a study region are identified using BEA's regional economic accounts.

The RIMS II method for estimating regional I-O multipliers can be viewed as a three-step process. In the first step, the producer portion of the national I-O table is made region-specific by using six-digit NAICS location quotients (LQ's). The LQ's estimate the extent to which input requirements are supplied by firms within the region. RIMS II uses LQ's based on two types of data: BEA's personal income data (by place of residence) are used to calculate LQ's in the service industries; and BEA's wage-and-salary data (by place of work) are used to calculate LQ's in the non-service industries.

In the second step, the household row and the household column from the national I-O table are made region-specific. The household row coefficients, which are derived from the value-added row of the national I-O table, are adjusted to reflect regional earnings leakages resulting from individuals working in the region but residing outside the region. The household column coefficients, which are based on the personal consumption expenditure column of the national I-O table, are adjusted to account for regional consumption leakages stemming from personal taxes and savings.

In the last step, the Leontief inversion approach is used to estimate multipliers. This inversion approach produces output, earnings, and employment multipliers, which can be used to trace the impacts of changes in final demand on directly and indirectly affected industries.

Accuracy of RIMS II

Empirical tests indicate that RIMS II yields multipliers that are not substantially different in magnitude from those generated by regional I-O models based on relatively expensive surveys.

For example, a comparison of 224 industry-specific multipliers from survey-based tables for Texas, Washington, and West Virginia indicates that the RIMS II average multipliers overestimate the average multipliers from the survey-based tables by approximately 5 percent. For the majority of individual industry-specific multipliers, the difference between RIMS II and survey-based multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show statistically similar distributions of affected industries.

Advantages of RIMS II

There are numerous advantages to using RIMS II. First, the accessibility of the main data sources makes it possible to estimate regional multipliers without conducting relatively expensive surveys. Second, the level of industrial detail used in RIMS II helps avoid aggregation errors, which often occur when industries are combined. Third, RIMS II multipliers can be compared across areas because they are based on a consistent set of estimating procedures nationwide. Fourth, RIMS II multipliers are updated to reflect the most recent local-area wage-and-salary and personal income data.

Applications of RIMS II

RIMS II multipliers can be used in a wide variety of impact studies. For example, the U.S. Nuclear Regulatory Commission has used RIMS II multipliers in environmental impact statements required for licensing nuclear electricity-generating facilities. The U.S. Department of Housing and Urban Development has used RIMS II multipliers to estimate the impacts of various types of urban redevelopment expenditures. In addition, BEA has provided RIMS II multipliers to numerous individuals and groups outside the Federal Government. RIMS II multipliers have been used to estimate the regional economic and industrial impacts of the following: opening or closing military bases, hypothetical nuclear reactor accidents, tourist expenditures, new energy facilities, energy conservation, offshore drilling, opening or closing manufacturing plants, shopping malls, new sports stadiums, and new airport or port facilities.

Regional Housing Planning Policy Statement

Introduction

The Institute for Public Policy & Economic Development's Housing Task Force has created a policy statement to focus on regional planning pertaining to housing. Currently, there is no regional plan in place and many communities lack their own plans. This results in both gaps and overlaps, with inconsistencies and a lack of coherence. Regional planning would provide an overarching framework that addresses appropriate land use, affordability and housing availability. Development occurring near transit centers and employment centers with higher densities and a desire to reuse, rebuild, reinvent, and reinvest is key to our region's future and the focal point of the statement.

Findings

Housing Stock

Lackawanna and Luzerne Counties' population has been on the decline since 1950. Most recently (2002 – present), population through migration has been increasing. However, since the region's death rate is higher than its birth rate, overall population has not increased. While it is expected that this trend will reverse itself in the near future, the region's housing stock continues to grow – most rapidly so in exurban areas, beyond the core cities and first ring suburbs. Existing housing stock in urban areas and first ring suburbs is deteriorating in many communities, where there is little or no investment or redevelopment, and which results in blight.

Household Affordability & Income

Housing and rental rates continue to increase. As income levels have not increased as rapidly, housing costs now consume a greater percentage of household income.

Housing Accessibility

Lackawanna and Luzerne Counties' population is older than the national median age and includes a significant percentage of elderly residents and early Baby Boomers. There is a lack of new housing designed to address this population's most pressing needs, including accessibility, access to transportation and other valued amenities.

Issues

In order for communities to function at a high level, there must be an adequate supply of housing in proximity to employment, public transportation, and facilities, such as public schools. A region's housing stock must include affordable and accessible for-sale and rental units to meet social equity goals and ensure community viability. The development of a diverse and affordable housing stock must be carried out, without sacrificing sound regulations that are in place to protect the environment and public health.

Housing issues transcend jurisdictional boundaries. Communities must forge cross-jurisdictional partnerships to develop coherent, long-term local housing policies that support a shared vision for housing and community development for entire regions. They must strengthen the policy linkages between housing and transportation, job centers and social services, and the whole spectrum of community needs. Coalition building, working toward consensus, and coordinating housing programs and resources are key tools and building blocks to addressing housing issues.

Affordability problems affect both renters and homeowners. Even among those with relatively higher paying jobs, high housing costs precipitate a significant decline in real, spendable income. For both renters and homeowners, housing and transportation costs consume a large share of the household budget. The widespread problem of housing affordability has a profound impact on the quality of life for families, especially children, and on the overall well-being of neighborhoods and entire communities.

Professional and citizen planners have access to a number of tools to help shape the direction of housing development, including comprehensive and strategic plans, zoning and other land use regulatory techniques and development incentives. All community stakeholders play a key role in supporting informed decision-making that creates housing options for all, including: low- and moderate-income households, seniors, people with special needs, families with children, and the homeless in both rural and urban areas.

Policy Guidelines

Regional planning for housing is necessary to prevent sprawl and preserve open space. Such planning can promote social equity, lead to effective use of communities' resources, foster economic development and strengthen the sense of community. A regional plan should focus on long-term sustainable development, creative incentives to promote green building, and focus on high-density, mixed-use development near transit and business centers. The plan should be developed with public participation and should be binding. The plan should account for environmental and social impacts, and it should be developed in concert with planning for economic development, transportation, land use, education, and public safety.

Reduce dependence on fossil fuels by promoting:

1. Compact development that minimizes the need to drive;
2. A mix of integrated community uses — housing, shops, workplaces, schools, parks, civic facilities — within walking or cycling distance;
3. Pedestrian-friendly human-scale development;
4. Development oriented around public transit; and
5. Home-based occupations and work that reduce the need to commute.

Reduce activities that encroach upon nature through:

1. Guiding development to existing developed areas and minimizing development in outlying, undeveloped areas;
2. A well-structured, open-space preservation plan that identifies key areas for preservation;
3. Remediation and redevelopment of Brownfield sites and other developed lands that suffer from environmental or other constraints;
4. Promote regional and local designs that respect the regional ecosystems and natural functions that support human communities;
5. Creation of financial and regulatory incentives for infill development, and elimination of disincentives; and
6. Promote land-use practices that use land efficiently, such as cluster development that focus on building at higher densities in a single area so that more open space may be preserved on adjacent land.

Meet human needs fairly and efficiently by:

1. Eliminating disproportionate environmental burdens and pollution experienced by historically disadvantaged communities;
2. Encouraging communities and housing developments that are socially cohesive, reduce isolation, foster community spirit, and resource sharing (example: co-housing);
3. Supporting affordable housing for a variety of income groups within the same community;
4. Encouraging diversity of occupants in terms of age, social, and racial/ethnic; and
5. Promoting housing located near employment centers.

Regional Plan Outcomes

The regional plan should seek to:

- Expand housing choices and opportunities for all.
- Create a strong local economy.
- Protect the environment, promote healthy living and preserve open space in a coordinated way.
- Encourage development near transit systems and create pedestrian- and cycle-friendly areas.
- Foster greater social cohesion.
- Promote a vibrant quality of life and higher standard of living.

- Encourage green building, conservation and use of alternative energy.
- Promote sustainable land use.
- Create a regional zoning code.

Policy Statements

The Institute for Public Policy & Economic Development supports planning policies that result in compact and mixed-use development that minimizes the need to drive, re-uses existing, in-fill, and Brownfield sites that have been thoroughly reclaimed and remediated, and which avoid the extension of sprawl. ("Sprawl" refers to low-density, land-consumptive, center-less, auto-oriented development typically located on the outer suburban fringes).

The Institute for Public Policy & Economic Development supports planning policies that encourage sustainable development policies that seek to equitably protect public health, safety and welfare, and that incorporate the needs of the disenfranchised. Certain planning decisions may improve the quality of life for some individuals at the expense of others (i.e., constructing a roadway, siting a bus depot or sewage treatment plant, or building housing near an industrial zone). This problem is acute in disadvantaged communities, where consideration, fair siting decisions, equal and open planning processes are not always offered. Sustainable planning and development goals aim to provide equal protection and access to opportunities in all communities, regardless of income status, race, gender, or ethnicity.

The Institute for Public Policy & Economic Development supports planning policies that encourage participatory and partnership approaches to planning, including for sustainability, integrally involving local community residents in setting the vision for and developing plans and actions for their communities and regions. Planning decisions that follow should be consistent with those community visions. Plans that are citizen-based, reflecting resident intents and visions for their communities' futures, have the highest probability of successful adoption and implementation. Citizen participation in planning helps ensure fair and efficient targeting of resources to community needs.

The Institute for Public Policy & Economic Development support initiatives and partnerships with other organizations that: a) support research and development of technology, promoting the four general policy objectives for sustainability; and b) provide the best available economic, social, and environmental data and indicators on impacts, alternatives, costs, and benefits for integrated decision-making at all levels of government. Well-informed policy choices that take into consideration the fundamental links among the economy, the environment, and society will be more likely to result in actions that serve all three rather than one at the expense of the others.

The Institute for Public Policy & Economic Development supports planning policies that offer incentives and employ other economic tools to improve the sustainability of the natural environment, enhance natural resources, and improve community subdivision and building design standards. Economic tools like financial incentives hold promise for bringing about the greater implementation of sustainable development.

The Institute for Public Policy & Economic Development supports planning policies and legislation that encourage alternatives to gas-powered vehicles, such as public transit, alternatively-fueled vehicles, cycle and pedestrian routes, and cycle and pedestrian-friendly design and development.

Use of single-occupant gas-powered vehicles significantly contributes to increasing carbon dioxide concentration and greenhouse gases in the atmosphere, air pollution, and nuisance and societal costs of traffic congestion locally and regionally. Planning and development actions that reduce the need to drive may help to reduce carbon dioxide and other emissions, alleviate traffic congestion and add system capacity.

Policy Position

All stakeholders within the community must support the goal of providing housing opportunities to households of all ages, races and income levels throughout the housing markets. Stakeholders should identify and strive to change or eliminate planning policies, regulations, and programs that have a disparate impact on groups identified by race, ethnicity, economic status, or disability.

Housing Stratification. Stakeholders should use comprehensive plans, housing elements, and development regulations to reduce housing stratification and spur the development and preservation of affordable housing.

Housing markets are now stratified by race, ethnicity and income. Such markets prevent some households, especially the poor, from gaining access to jobs, schools, shopping and other services, which reduces the quality of life for excluded households and exacerbates the problems associated with concentrated poverty and minorities. Regional plans should strive to provide a wide range of housing opportunities in as many locations as possible. This will help reduce societal ills resulting from the stratification evident in today's housing markets.

Communities must have updated comprehensive plans that include housing elements. The housing elements determine the housing needs for different households and create strategies to meet those needs. Where needed, density bonus programs, affordable housing funds and other incentive programs may be used to achieve affordable housing goals.

Demographic trends such as an aging baby boomer generation, an increase in minority house

holds, and the changing composition of households will drive the need for new housing options.

Affordable and supportive housing must be viewed as integral components of a comprehensive, region-wide housing policy and strategy to optimize the potential impact of local housing programs and ensure their effectiveness. Regulatory policies should be reassessed to ensure they reflect a range of housing options — a priority to develop more affordable housing linked with essential supportive services.

All stakeholders within a community should promote better balance between the location of jobs and housing.

Fair Share Distribution of Housing

The Institute for Public Policy & Economic Development supports a regional fair share distribution of housing, in general, and affordable housing, in particular, in proximity to employment centers and moderate- and low-wage jobs. Housing is a regional issue in metropolitan areas, usually requiring inter-jurisdictional dialogue and cooperation. Ideally the jobs available in a community should match the labor force skills, and housing should be available at prices, sizes and locations suited to workers who wish to live in the area. Communities must aim to achieve a jobs-housing balance within their boundaries by investigating the types of mismatches that exist between an area's types of jobs available and the corresponding housing types and costs. While correcting just one jobs-housing balance in a region can bring benefits, the result of multiple jobs-housing balancing efforts throughout a region can result in shorter commutes and, in the long run, a broad reversal of the negative consequences of any such jobs-housing imbalance.

Regulatory Reforms to Achieve Jobs/Housing Balance

The Institute for Public Policy & Economic Development encourages zoning provisions and local regulations that promote a jobs-housing balance. Examples include, among others: allowing more mixtures of uses in downtown/commercial areas; encouraging Planned Unit Developments (PUDs) to provide a broader mix of residences and employment; and revising local home occupation regulations to offer greater flexibility. Many zoning ordinances impede the achievement of a jobs-housing balance; however communities are increasingly realizing that their land use plans and regulations have a major influence on whether workers can arrive at their job location on time and whether workers even have the choice of living close to their jobs. Barriers or obstacles to achieving a jobs-housing balance include development practices that may need to be removed from local land-use regulations. There are a wide variety of techniques that directly or indirectly support jobs-housing policies and objectives.

Coordination with Economic Development

The Institute for Public Policy & Economic Development encourages local governments throughout Lackawanna and Luzerne Counties to recognize in their economic development

strategies the importance of an adequate and affordable housing stock. Examples of potential strategies include: (1) Preserving existing housing stock near major employers and transit hubs in order to create housing opportunities in close proximity to new suburban, exurban, and rural employment centers; (2) Performing housing impact studies, in conjunction with large employers, to analyze the availability of affordable housing for workers in proximity to work locations; (3) Encouraging employers to invest in their workers and their neighborhoods by supporting employer-assisted housing programs, especially those that encourage employees to own or rent in the neighborhood adjacent to the employer; and (4) Supporting transportation and transit improvements that allow low-income households in central cities to access jobs in surrounding suburbs.

Many large employers around the country recognize that affordable housing is a serious employee recruitment and retention issue. Further, many large institutions, such as Johns Hopkins University in Baltimore, have created for employees home ownership programs in nearby neighborhoods to achieve a better jobs/housing balance, spur reinvestment in older neighborhoods and enhance community stability.

Housing Preservation

Community stakeholders should incorporate the preservation of existing housing stock as a core policy objective of a comprehensive and coordinated housing strategy. The preservation of older, market-rate, owner- and renter-occupied housing, much of which is affordable to low-income households, should be used as a filter whereby land use choices and decisions are made on new development or proposed redevelopment projects. Stakeholders should examine the impact of land use regulations and building codes on the feasibility of rehabilitating the existing stock of affordable housing with a focus on making the requirements and standards more rehab supportive. Disinvestment in and physical deterioration of low-cost rentals are thinning the available supply. More people are now feeling the effects of housing affordability, as rising real estate markets have resulted in rapidly increasing rents or a conversion from renter to owner-occupied stock. The cost margins to renovate affordable housing are daunting, as renovation is less predictable than new construction. Often a gap exists between the costs of renovation and resources available to finance such renovation. Strict building codes may impose additional costs by requiring that new construction building standards be applied. Other regulatory barriers that serve to complicate a project and make it more expensive, include: historic preservation regulations, environmental and access provisions, citizen opposition, conflicting codes — such as building code vs. fire code, and a complex approval system.

Accessibility and Visitability

It is important that multi-family residential developers comply with the accessibility requirements of federal and state law, including the Fair Housing Act. Community stakeholders should encourage voluntary programs to promote visitability and universal design features in new and remodeled homes. Accessible housing increases housing opportunities and choices

for the elderly and persons with physical disabilities, and enhances convenience for non-disabled persons and children. As a region's population trends toward an older demographic, visitability and universal design will become increasingly important.

Residential Development Practices

Community stakeholders should seek to create comprehensive plans that encourage new residential developments that are not isolated from community services and, which are created to encourage pedestrian mobility and access to public transportation. Where applicable, residential development must be built adjacent to community services or otherwise include community services to reduce reliance on automobile transportation. Where applicable, stakeholders should seek to unbundle the cost of parking from basic housing costs. Elderly and disabled residents should be able to live in communities that are integrated with community services and public transportation. Separating the cost of parking improves the affordability of housing by shifting these costs from all residents to only car owners.

Energy Efficiency

Community stakeholders should encourage green building in new residential or adaptive reuse developments, including affordable housing. Integrating basic building strategies that consider easy access to jobs to minimize commuting, building orientation, water and energy efficient appliances, and appropriate landscaping will help make housing more affordable by increasing savings on transportation, operational, and maintenance costs.

Regional Planning and Career Preparedness Policy Statement

Introduction

The Institute for Public Policy & Economic Development has created a policy statement focusing on regional planning with emphasis on career preparedness. Currently, the region's plan for career preparedness involves projects in high school that help students identify strengths and possible career interests, as well as offering vocational courses. By working to ensure students are properly educated, this region has made a commitment to education and in turn, economic stability.

Findings

State Requirements

Pennsylvania students must complete a project in one or more areas of concentrated study under the guidance and direction of the high school faculty. The purpose of the project, which may include research, writing, completion of a college application or some other appropriate form of demonstration, is to assure that students are able to apply, analyze, synthesize and evaluate information and communicate significant knowledge and understanding.

Pennsylvania's Department of Education requires students to pass proficiency examinations and complete a number of mathematics and English courses in order to graduate. Moreover, the Commonwealth of Pennsylvania has determined that beginning in the 2016-2017 school year, students must also demonstrate proficiency in American History/Civics and Government/World History (one of three), English Language, English Literature, Algebra I/Geometry/Algebra II (two of three), and Biology/Chemistry (one).

Lackawanna & Luzerne Counties

Lackawanna County has a number of offerings in both career preparation and traditional learning fields. West Scranton High School, for example, has an entire section of its course listings devoted to "Vocational Electives" (e.g., cosmetology, horticulture and landscaping, electronics). Mid Valley High School also offers a number of classes aimed to prepare students for placement in careers after graduation, but it also places a great emphasis on completing a senior project as a means to succeed, integrating requirements for the project into other required classes. While Lackawanna County does not have specific vocational schools, it does offer continuing education and career/vocational training programs.

Luzerne County has a variety of career preparation methods in its secondary schools. Hazleton Area High School offers a number of classes in "Career Preparation" (e.g., welding, law enforcement). In the Wilkes-Barre Area School District's secondary schools, career

preparation courses are available and a lengthy senior project begins during students' sophomore year. While it would be advantageous for students to use this project as a jumping off point for a possible future educational focus or job, many students do not view this project in that light. In addition to these schools, Luzerne County has a number of vocational schools that work in conjunction with traditional schools and area businesses to provide students with co-op programs.

Educational Accessibility

In both Lackawanna and Luzerne Counties, career preparedness education is being taught; however, not all of these programs are equal. Larger school districts, such as Hazleton, Wilkes-Barre, and Scranton, provide courses designed to teach students about specific careers after high school (cosmetology, electrician, mechanics, etc.). Smaller school districts place a greater emphasis on senior projects – analyzing and presenting research that they do in conjunction with a faculty advisor. Vocational education is more likely to be found in more urban settings than in suburban or rural school districts. Currently, no programs are offered that focus on the region's new alternative energy industry.

Job Availability

Lackawanna and Luzerne Counties have experienced tremendous job growth in the areas of alternative energy and health care. In terms of alternative energy, the counties could see a boom with proposed drilling for natural gas in Marcellus Shale. It remains to be seen what will happen with natural gas drilling, but jobs with drilling companies and complementary industries could grow from the continued drilling for the alternative energy resource. With an aging population, Northeast Pennsylvania can expect many jobs to continue to be created to accommodate the need for health professionals. In addition, other industries are seeking financial and computer science professionals in the continuation of Wall Street West.

Issues

In order for school districts to adequately provide the education necessary for students to be prepared for higher education and/or careers, they must further emphasize the need for education beyond high school. Reports have shown that those who obtain only a high school degree are less likely to be employed than those holding an Associate's or Bachelor's degree. It is increasingly vital to have some post-secondary education in today's economy. Technical schools, two- and four-year colleges, and certificate programs offer more programs that teach students how to succeed in such work environments.

The Commonwealth of Pennsylvania requires high school graduates to complete a comprehensive senior project. School districts interpret this project in different ways. For instance, sometimes schools allow small group projects to take place of individual projects. Other schools begin the senior project process during the sophomore, junior or senior year. There is

little consistency in this region concerning how students are required to handle these projects. Ultimately, it is up to schools and their faculties who advise students to work on and complete the project.

Students learn in different ways. Some are hands-on learners, while others learn best through lectures and note-taking. Also, some students know early on that they do not want to pursue higher education in a college/university setting. One curriculum is not necessarily going to engage and/or satisfy the educational needs of every student within a district. Schools are forced to produce a number of elective courses in addition to required classes in English, social studies, math, and science. School districts face significant costs pertaining to career preparedness courses due to additional hiring (field experts), insurances, and supplies.

Acquiring the funding necessary to offer effective career preparedness programs is difficult. Programs in cosmetology, welding, electrical engineering and others come at a high cost to taxpayers. Currently, school districts have a difficult time funding core programs and additional costs towards career preparedness courses leave them with a tight budget. Taxpayers are aware of trends in education and may be unwilling to help fund programs that do not work to send students to colleges or universities.

Policy Guidelines

In order to implement a regional policy regarding career preparedness, Lackawanna and Luzerne Counties must come together and develop programs for students to learn about the opportunities in this region and find out how best to prepare themselves for such opportunities. A regional policy would ensure students have access to the education that best fits their future goals. Promoting a variety of educational options will attract more students to these industries and allow those who would otherwise drop out of school to remain in the classroom and focus on a subject that better suits their goals. By committing to bettering the education of today's students, Lackawanna and Luzerne Counties are committing to the long-term growth and development of Northeast Pennsylvania.

Emphasize the need for post-secondary education by:

1. Developing programs that meet the needs of broad student interests;
2. Stressing the need for additional training in whatever career choice students make;
3. Securing local business or government leaders to talk to students about hiring processes and how they can work to make themselves the best candidate for the job; and
4. Working with students to identify strengths and how they are best utilized after high school.

Offer career preparedness programs by:

1. Applying for federal and state grants to pay for such programs;

2. Working with business and government partners to provide free lectures and seminars;
3. Offering co-op programs for students to simultaneously attend school and work;
4. Further development of programs by which students from area schools may attend classes and receive college credit from local higher education institutions;
5. Hiring professionals on a part-time basis to teach vocational electives, such as cosmetology, electrical engineering, and welding, as well as newer industry demands such as alternative energy management;
6. Working with vocational schools to find job placements for students upon graduation; and
7. Collaborate and share resources, both internal and external to school district boundaries.

Educate students about regional issues by:

1. Working with Workforce Investment Boards and local economic development groups to identify growing industry clusters and occupations, and pass on skill and education requirements using career ladders;
2. Bringing local leaders into the classroom to discuss how the region is changing and what today's students can look forward to in the near future; and
13. Inviting area college professors to discuss the region's popular industries and how they can be best educated to fill openings within those industries.

Regional Plan Outcomes

The regional plan should seek to:

- Coordinate economic development, workforce development, and Pre-K – 20 to create a seamless economic development plan for the future.
- Further educate the Lackawanna and Luzerne County students in ways that help them prepare for college and a career.
- Cultivate new and exciting career preparedness classes/opportunities.
- Involve the local business community in the process of educating and informing students.
- Provide opportunities for students to gain experience, while gaining exposure to a comprehensive, traditional education.
- Encourage students to pursue careers in industries that best match their skills & interests.
- Promote the practical application of lessons learned in secondary school.
- Encourage students to pursue opportunities within Northeast Pennsylvania..

Policy Statements

The Institute for Public Policy & Economic Development supports collaboration between workforce development, economic development and Pre-K - 20 to ensure that business needs are met through ongoing education and training of the current and future workforce.

The Institute for Public Policy & Economic Development supports the further development of career preparedness programs and electives that allow students to sample post-high school career and vocational opportunities. Such programs would allow students to identify strengths and gain valuable experience learning about steps needed to achieve their goals.

The Institute for Public Policy & Economic Development supports school districts that promote to students both higher education and vocational options. The Institute supports schools that allow students to make their own choices concerning their future. We support schools that give students the opportunity to explore a number of possibilities that lead them to determine what is best for them.

The Institute for Public Policy & Economic Development supports the improvement and creation of more vocational schools in both Lackawanna and Luzerne Counties. The Institute believes alternative learning methods are needed in today's economy and vocational training is one way in which students interested in pursuing careers in hands-on jobs can obtain the training and experience needed to compete for jobs.

The Institute for Public Policy & Economic Development supports policies aimed at encouraging students to pursue any educational avenue after graduation. The Institute recognizes that a post-secondary education is crucial in today's economy and that students and stakeholders must be proactive in their pursuit of jobs/highly trained employees.

The Institute for Public Policy & Economic Development encourages school districts to foster a sense of importance when it comes to education. The Institute believes that education is the key to a successful and fruitful life. We feel that an increased emphasis on the importance of education will lead teachers and students more actively engaged in the learning process.

The Institute for Public Policy & Economic Development encourages Lackawanna and Luzerne Counties to work to obtain grant funding in addition to state and federal funding for career preparedness/vocational training. It is vital for regional stakeholders and relevant governments to be financially engaged in the process of properly educating our students. The Institute urges Lackawanna and Luzerne Counties to pursue additional funding.

Policy Position

Lackawanna and Luzerne County school districts must support the goal of providing a quality education, whether traditional or vocational, for the region's students. County governments should strive to offer a variety of options to students of all ages and work towards equipping students with the proper education and tools to successfully transition into the workplace. Lackawanna and Luzerne Counties should identify and strive to change or eliminate planning policies, regulations, and programs that have a disparate impact on groups identified by race, ethnicity, economic status or disability.

Equal Opportunity.

Lackawanna and Luzerne County school districts must be aware of the choices students have when entering the workforce. School districts must offer a variety of choices so that students may make the best choice for themselves and their future. In order to prepare students for the future, school districts must do a better job of preparing students for the challenges ahead.

Schools must provide varied opportunities for students to explore their skills and determine where they have potential and desire to grow. Offering a wide range of courses with traditional subjects (English, History, Math, Science) as well as vocational electives (cosmetology, electrical engineering, mechanical engineering) would allow students to experience subjects that may peak their interest and complement their skill sets.

Students should be given opportunities to engage in projects that will allow them to identify their strengths and weaknesses. School districts must continue to foster hard work and ingenuity on senior projects, so they are able to work on subjects important to them. Senior projects are gateways to possible careers; students should not be discouraged from studying and analyzing whatever they find interesting. Every student should have the opportunity to study what will make him or her succeed.

Expansion of Senior Projects.

Students are influenced at an earlier and earlier age. Schools must help them identify their strengths earlier in their education. School districts must also make efforts to go above and beyond Pennsylvania Department of Education guidelines.

Junior high school students should also have opportunities to explore their skills and advance their research and presentation skills. Teachers and parents must work to help students determine what interests them and how they can apply their skills to a project. A junior high project could be completed any time during a students' time in the junior high school and could be assigned for the summer – so that students continue knowledge and applications learned during the school year.

Promoting the region while looking beyond.

Northeast Pennsylvania will see a boost in the coming years in terms of both conventional and alternative energy. Lackawanna and Luzerne County school districts should not push students toward these fields specifically, but they should make students aware of the needs in their own back yard. No doubt, students must be prepared for jobs within and beyond Northeast Pennsylvania.

In an increasingly global economy, students must learn the basics of globalization and how goods and services produced here could very well be used on the other side of the world. It would be fascinating for students to learn how, by working together, the world can function efficiently and in a sustainable manner. Careers in alternative energy, health care, electrical engineering, and business all can be attained on the local, national and international stages. Schools must be prepared to educate students beyond what their eyes can see.

Education is the key to a solid future. This sentiment must be a mantra in Lackawanna and Luzerne County schools. Parents, teachers and students must know that education is the key to prosperity. Whether it is through a career in public service or work in the private sector, education will get help them to obtain the best possible careers to help result in a happy and satisfying life. Vocational electives, core requirements, and other opportunities for students should all be seen as career stepping stones and building blocks.

The Institute urges school districts to work with students of all abilities to help them achieve their educational and career goals. All types of education are vital to a functioning American economy. We need electricians just as much as we need doctors; we need welders just as much as we need accountants. We must fully educate students, as the value of an education goes beyond dollars and cents.

Regional Science, Technology, Engineering and Math Curricula Policy Statement

Introduction

The Institute for Public Policy & Economic Development has created a policy statement aimed to emphasize the need for STEM (Science, Technology, Engineering, and Math) curricula to be implemented throughout the region. Currently, STEM subjects are being taught in the region with great regularity. However, emphasizing the practical use of STEM will lead students to be more engaged in everyday life and look at the world around them in a different light. There are numerous in-demand job opportunities surrounding STEM subjects and skills, including, among others: alternative energy management, “Green” architecture, electronics, medical research, etc. While many of Lackawanna and Luzerne Counties’ school districts teach STEM-related subjects, the Institute believes that these districts must continue to explore options to further the development of their students in such subjects. Allowing local colleges, universities, school districts, businesses, and governments to become stakeholders in the push for STEM, adds stakeholder and community incentives to educate our students in the best way possible. Implementing community-based STEM partnerships at the K-12 level would allow students to gain an in-depth look into how STEM subjects may be applied to many careers in the changing global economy.

Findings

Schools

Luzerne County has twelve public school districts. Data show that public school enrollment is steadily increasing due, in part, to the closings of many parochial schools and the migration of families to Northeast Pennsylvania. For the 2009-2010 school year, Luzerne County had 42,566 students in Grades K-12, up from 42,439 in 2008-2009. With the county’s continued rise in enrollment, it is clear that STEM proficiency needs to be maintained and then advanced. Lackawanna County also has twelve public school districts. Data show that K-12 enrollment in Lackawanna County public schools has risen from 28,450 in the 2008-2009 school year to 28,005 in the 2009-2010 school year. Many factors have contributed to this shift in enrollment, but with an increase in the county’s unemployment rate over the last several years, it is fair to say that families are moving to areas with lower taxes and greater job opportunities. With the county’s decrease in public school enrollment, there is a need to continue the provision of a quality STEM education program in order to draw more families to the area.

Stakeholders

Both Lackawanna and Luzerne Counties have benefitted from the generosity of local governments, businesses, and individuals. Many local businesses and community leaders consistently

donate time and money to community projects that help to enhance the region's stature. To provide the best possible public education, it is clear that all groups must come together as stakeholders in the future of students and the region. As stakeholders, these groups would help provide funding and resources needed for students to excel in STEM-related coursework. Stakeholder partnerships could range from providing funds to job-shadowing opportunities and lecture events or even internships upon graduation from high school. Such resources would provide incentives for students to strive to succeed in STEM, with an eye toward thriving in STEM-related careers.

Another key stakeholder in this process is the federal government. Central to his 2011 State of the Union Address, President Obama made it clear that more than 100,000 new teachers would be hired in the coming decade to promote and teach STEM-related subjects. Without these teachers, it will be difficult to prepare and inspire future generations to address the long-term challenges facing our country, including: the environment, medicine and space exploration. It is important for Luzerne and Lackawanna Counties to work closely with the Commonwealth of Pennsylvania to ensure maximum funding is attained.

Jobs

STEM related subjects are critical parts of the 21st Century's global economy. Colleges and universities offer scholarships for students pursuing careers involving one or more of these subjects. Alternative energy has become a major industry in Northeast Pennsylvania and it is beneficial for the region's schools to encourage area students to aim to secure jobs within this industry.

Alternative energy management, electronics, architecture, and secondary and college level math and science education are quickly becoming fields in which talented, enthusiastic, young professionals are needed. With an aging population, Lackawanna and Luzerne Counties stand to benefit from continuing to educate students in STEM subjects. Today's booming industries will offer the careers that will carry Northeast Pennsylvania into greater economic stability tomorrow.

Issues

The economy is a major factor affecting the viability of the involvement of community stakeholders in the STEM education process. Luzerne County's unemployment rate has increased from 4.7% in November 2007 to 9.4% in November 2010. Lackawanna County's unemployment rate has risen from 4.2% in November 2007 to 8.9% in November 2010. Realizing this, it is difficult to predict how forthcoming businesses and individuals will be to provide STEM education funding.

Moreover, unemployment has bred countless home foreclosures. With such a high unemployment rate, the likelihood of an unsteady tax base within the region is great. Also, in certain

instances, local governments are constricted by the Pennsylvania Legislature as to how much they are allowed to increase millage rates used to calculate taxes. Properly funding STEM programs is of vital importance and with an economy coming out of a recession, it is unknown as to how Lackawanna and Luzerne County residents will respond to higher taxes.

Furthermore, the federal government is facing immense pressure to cut spending to reduce budget deficits. With STEM funding proposed for the future, it remains to be seen how the current administration will deal with these and other issues facing the nation. The Obama Administration sees STEM education as a way to revitalize the American economy; however, the American public may be hard pressed to accept any measure that places a further burden on the country's national debt.

STEM education programs are inconsistent among the region's school districts. Some school districts offer clubs, competitions, and field research in conjunction with state agencies and non-profits. Others have expanded curriculum to include subjects like engineering and technology.

Policy Guidelines

To implement a regional policy regarding STEM, educators and school districts must come together for the common purpose of educating students. This union of stakeholders would promote the benefits of STEM and work to make such knowledge known to forthcoming generations of Lackawanna and Luzerne County students. A strengthened regional commitment to STEM education will lead to more opportunities for the region and students. By promoting these subjects, students will grow more accustomed to seeing the world in an analytical way and build upon the knowledge they gain in English and social sciences.

Encourage the study of STEM subjects by:

1. Developing a curricula that emphasizes the need for both STEM and social science classes;
2. Implementing new STEM-related classes;
3. Encouraging community partners, such as colleges, universities, businesses, and local governments, to commit resources and time to the development of STEM programs; and
4. Emphasizing the need for practical, analytical employees in the workplace.

Fill retiring teachers' positions by:

1. Hiring teachers who are willing and able to focus on STEM subjects;
2. Working with new teachers to develop new and innovative techniques for making STEM

- subjects more exciting;
3. Providing training opportunities for teachers to improve current skills;
 4. Offering incentives for teachers to further their own education through partnerships with local stakeholders;
 5. Developing programs for area college students to garner and transition into work placements; and
 6. Hiring those who understand the current state of STEM-related subjects and who are effective teachers.

Pay for STEM-related programs by:

1. Applying for federal or state grants;
2. Soliciting community stakeholders to donate time, money, or other resources to school districts;
3. Using inexpensive means to teach both basic and complex ideas in all subject areas; and
4. Accepting the aid of local college students in terms of field experience or intellectual capital.

Regional Plan Outcomes

The regional plan should seek to:

- Further educate the students of Lackawanna and Luzerne Counties.
- Cultivate new and exciting STEM programs.
- Involve community stakeholders in the process of educating students.
- Provide opportunities for local college students to gain experience while teaching students about the new developments in STEM-related programs.
- Encourage students to pursue careers in STEM fields.
- Promote the practical application of STEM knowledge.
- Encourage local college students to stay in the region upon graduation.
- Provide training opportunities for teachers to continue their education.

Policy Statements

The Institute for Public Policy & Economic Development supports increased efforts to promote science, technology, engineering, and math in Lackawanna and Luzerne County schools. We support policies that will allow for students to engage in new and interactive lessons aimed at encouraging a focus on STEM-related subjects. Furthermore, we support efforts to engage all students in these fields of study as a means of expanding their exposure and knowledge

base.

2. The Institute for Public Policy & Economic Development supports the involvement of community partners in the education of Lackawanna and Luzerne County students. We support the donation of time, resources, and/or money toward the betterment of the region's public education. Community stakeholders can provide firsthand experience for local students to see the practical applications of STEM knowledge.
3. The Institute for Public Policy & Economic Development supports the hiring of area college students to teach STEM-related courses. We feel that the area colleges provide a quality, contemporary education in these subject areas and hiring and supporting these students will provide Northeast Pennsylvania with many new young professionals. Young professionals will no doubt breathe new life into an increasingly aging region; a younger group of workers may also attract businesses that may spur an economic revival.
4. The Institute for Public Policy & Economic Development supports policies aimed at becoming more competitive in terms of grants to increase STEM funding. We feel that it is imperative for Lackawanna and Luzerne Counties to work with local school districts and the Commonwealth of Pennsylvania to adopt policies that allow area schools to seek grant funding and additional state and federal aid.
5. The Institute for Public Policy & Economic Development encourages local legislators to craft policies aimed at increasing funding for STEM-related subjects and programs associated with the practical application of STEM education. The Institute feels that legislators who seek to make such available to the region's students would be providing both the students and the region a great service.
6. The Institute for Public Policy & Economic Development encourages students in Lackawanna and Luzerne Counties to pursue STEM-related careers. With college degree rates in STEM-related subjects at a low throughout the country (national percentage of 23.9%), Pennsylvania students, and particularly those in Lackawanna and Luzerne Counties, will benefit greatly from state colleges and universities that offer high quality STEM-related undergraduate and graduate programs and degrees.

Policy Position

All stakeholders in Lackawanna and Luzerne Counties must support the implementation and continued success of STEM-related subjects in public schools. Stakeholders must work with schools to identify areas where they may be of assistance and work with those schools to play a role in providing the best STEM education possible. Community stakeholders must play a vital role in public education to ensure students' success.

STEM Programs.

Stakeholders must work with school districts to determine in-demand skills. As stakeholders help school districts shape curricula and what is taught, students become more engaged and would be more apt to exploring the possibility of STEM-related careers. Stakeholders must play a significant role in providing resources, learning opportunities and shaping STEM curricula. Without the support and generosity of community stakeholders, Lackawanna and Luzerne County students will be at a major academic disadvantage.

Programs should focus on practical application of STEM subjects so that students see how applications in STEM affect their everyday lives. Showing students that math and science are involved in nearly every process we undertake engages them and allows them to realize how science and math lead them to answer questions about the world.

Providing the opportunity for every student in Lackawanna and Luzerne County to receive the benefits of these stakeholders should also be of vital importance. Underserved populations, minorities, and young women should be especially encouraged to pursue these opportunities.

While the education of all students is critical, these populations represent a small percentage of current STEM-related careers. Stakeholders must look to these populations first and foremost.

Teachers.

The Institute for Public Policy & Economic Development supports the hiring of well qualified teachers to teach STEM-related subjects. Hiring well qualified teachers is of prime importance to student success.

With limited financial resources, it would be difficult to attract more experienced teachers; however, this serves as an opportunity to hire a younger workforce and to keep recent college graduates in the area. Recent college graduates have studied the most current issues involving environmental science, chemistry, biology, and math; they can offer students a unique perspective. School districts must support teachers in the implementation of new, innovative and effective instructional materials and strategies.

Engagement in the Process.

The Institute for Public Policy & Economic Development encourages parents, stakeholders, and schools to engage in the process of educating Lackawanna and Luzerne County students.

It is crucial for schools to make learning about STEM-related subjects fun and engaging, particularly from a young age. Engagement at the elementary level can set the tone for how students feel about STEM subjects. Producing science fair projects, playing math games, and beginning to understand the scientific method are all important tools to share with elementary school students. Teachers and community partners share the responsibility of providing

ample opportunities for elementary school students to see practical and fun applications of STEM.

Economic Benefits.

The Institute for Public Policy & Economic Development supports the region’s economic growth through educational institutions.

College stakeholders would benefit from the experience and possible job offers their students receive as part of a STEM-related teacher exchange. Also, students would benefit from receiving a strong math and science education; the Institute supports students seeking higher education and hopes they remain in or return to Northeast Pennsylvania to work for area businesses or to start their own business. Studies show that a well-educated workforce tends to generate a better economy. The Institute encourages our well-educated students to lead both Lackawanna County and Luzerne County into a new era of prosperity.

Resources:

- Pennsylvania Department of Education
- Pennsylvania House of Representatives Education Committee
- St. Francis University – Central PA STEM
- STEM Education Coalition
- Team Pennsylvania Foundation
- The Institute for Public Policy & Economic Development
- United States Department of Education

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The Institute for Public Policy & Economic Development provides essential research, analysis and consultation services to small and mid-size cities, counties, non-profit organizations, and businesses aiming for full participation in the 21st century economy.

The Institute serves as a resource and consultant for communities to develop more effective and efficient government, best practices, preparation of applied research, strategy development, and processes for their implementation. Based on these efforts, The Institute develops models for replication by other municipalities confronting similar challenges.

The Institute five task forces comprise of community and industry leaders from across the region. The task forces of The Institute for Public Policy & Economic Development study public policy as it relates to Northeastern Pennsylvania. Policy analyses and policy positions are published annually.

The Institute for Public Policy & Economic Development is a partnership among Keystone College, King's College, Luzerne County Community College, Marywood University, Misericordia University, Penn State Wilkes-Barre, University of Scranton, and is owned and managed by Wilkes University.

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