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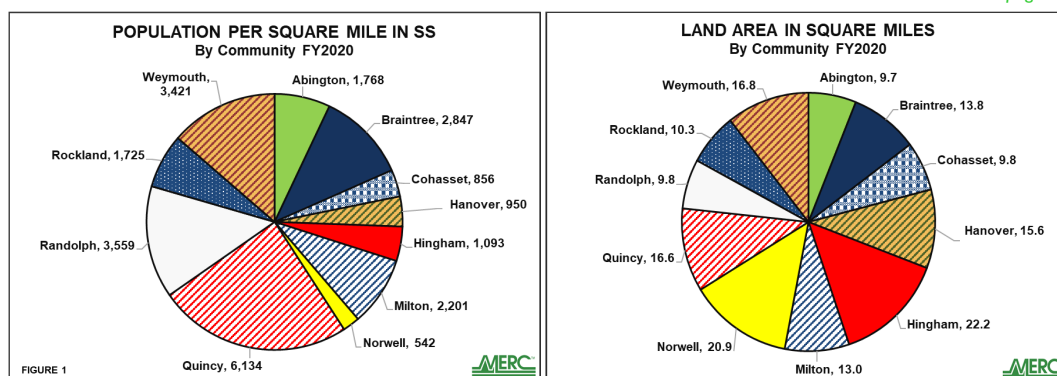
## South Shore Spent Half a Billion Dollars on Education in 2021

**By: Emily Gray**

Abington, Braintree, Cohasset, Hanover, Hingham, Milton, Norwell, Quincy, Randolph, Rockland, and Weymouth are the eleven communities that make up the South Shore (SS) region. Municipal revenues are used by cities and towns to fund expenditures such as general government, public safety, and education. To monitor municipal expenditures in towns and cities in South Shore, expenditures have been divided into the following six categories: Debt Service, Education, Police, Fire & Other Public Safety, Public Works, Fixed Costs, and All Other.

Communities within the South Shore region vary in size and population density. The comparison between a communities' land area and population density can be observed in Figure 1. The left graph represents the communities within SS land area in square miles and the right graph depicts the population density per square mile. There is a distinguished difference between land area and population density among the communities, which could have contributed to the variations of expenditures throughout SS. The eleven communities of the South Shore region span just over 158 square miles. The largest land area in SS was Hingham

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## The Dynamics of College Attendance in Greater MetroWest 2014-2021

**By: Juan J. Maquilon**

A highly-educated population traditionally has been at the center of Massachusetts' and Greater MetroWest's economic success. As we continue to emerge from the COVID-19 pandemic, it is a good opportunity to assess the pipeline of future college-educated residents. Using data from the Massachusetts Department of Elementary and Second Education (DESE), this article takes a first look at college enrollments following high-school graduation from the different districts that make up the Greater MetroWest (GMW) region.

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**Emily Gray**

Research Assistant

**Focus**

Municipal Revenue

**Major**

Economics

YOG 2022

with 22.2 square miles followed by Norwell with 20.9 square miles. The smallest land area in South Shore was Randolph coming in at 9.8 square miles, followed by Abington with 9.7 square miles.

As previously stated, the population density differs considerably from land area among the communities within the SS. The South Shore region had a population of 355,544 people in 2020. Quincy had the largest population density in SS coming in at 6,134 people per mile. Randolph had the second largest

population density with 3,559 people per square mile. The smallest population densities in 2020 were Norwell with 542 people per square mile and Hanover with 950 people per square mile. A community with a large land area does not necessarily correspond to a large population per square mile. A town or city may have a large land area by square miles but have a lower population density respective to their neighboring communities. Norwell has the second largest land area by square mile (20.9 miles) in the South Shore region but had the smallest population density of the eleven communities (542 people per

**MUNICIPAL GENERAL FUND EXPENDITURE**  
FY2021 South Shore Communities Total: 1.2B

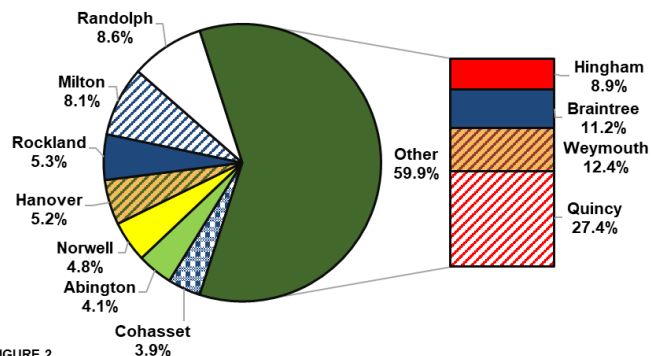


FIGURE 2

square mile).

Figure 2 represents the Total Municipal General Fund Expenditure within the South Shore region categorized by the percent each community spent in 2021. Expenditures are amounts communities have to spend to provide services to residents within the communities. A large percentage of expenditures is funded by the tax levy (property taxes). In 2021, the Total General Fund Expenditure was just over \$1.2 billion. Among the communities in South Shore, Quincy, Weymouth, Braintree, and Hingham had the largest municipal expenditures contributing 59.9% of all general fund expenditures. Cohasset, Abington, and Norwell together contributed less than 15% of the general fund expenditure in 2021. Cohasset had the smallest general fund expenditure (3.9%) spending \$47 million followed by Abington (4.1%) which spent just over \$50 million in 2021. The community with the largest municipal fund expenditure was Quincy, spending \$335 million, and representing 27.4% of the total expenditure in the South Shore region. Quincy spent more than the second (Weymouth) and third (Braintree) communities with largest ex-

**FIVE LARGEST COMMUNITIES BY EXPENDITURE**  
By South Shore Community FY2021

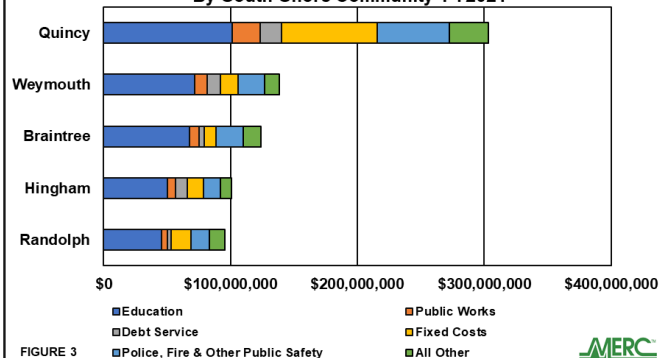


FIGURE 3

MERC

penditures added together.

In Figure 3, the five largest communities by expenditure, Quincy, Weymouth, Braintree, Hingham, and Randolph can be observed by the dollar amount spent in each category. Total expenditure included Education, Public Works, Debt Service, Fixed Costs, Police, Fire & Other Public

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**Juan J. Maquilon**

Intern III

**Focus**

College Enrollment

Employment

**Major**

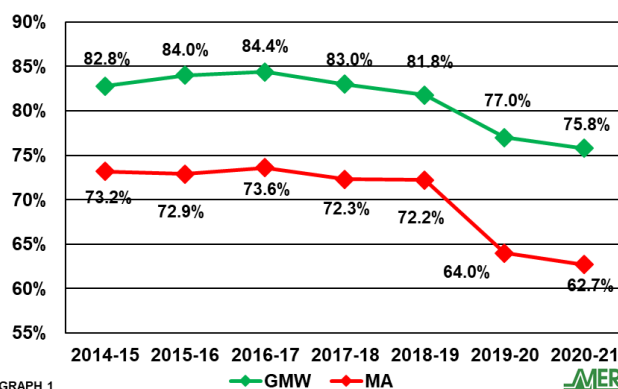
Economics

YOG 2024

Greater MetroWest consists of 13 Communities: Ashland, Framingham, Holliston, Hopkinton, Hudson, Marlborough, Natick, Northborough, Sherborn, Southborough, Sudbury, Wayland, and Westborough. It is important to note that since the DESE dataset is available at the school district level, the data presented here for Sherborn and Sudbury will also include students from Dover and Lincoln, respectively, with whom they each share a school district. The college attendance rates cited in this article refer to the percentage of graduating high school seniors who attend a two or four-year institution of higher education by March of the year following their high school graduation. This article breaks down these rates of attendance by gender and community and tracks the overall trend over time.

Graph 1 compares college attendance rates in Greater MetroWest and Massachusetts as a whole over time from 2014-2021. GMW and Massachusetts share a similar pattern in attendance rates throughout the years. GMW has consistently had a higher rate than the state. Both regions experienced a peak in 2016-17 with Massachusetts at 73.6%, and

2014-2021 GMW &amp; MA COLLEGE ATTENDANCE RATES

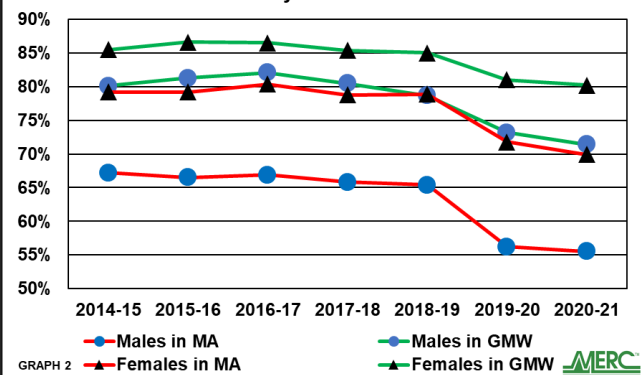


GRAPH 1

— GMW — MA



GMW being 10.8 percentage points higher at 84.4%. In the last two academic years for which data is available (2019-21), both GMW and Massachusetts had significant decreases in attendance most likely due to the COVID-19 pandemic. GMW suffered a drop of 6.0 percentage points, while the state's attendance rate dropped by about 9.5 percentage points. These two years represent the most significant movement in attendance rates during the period considered in this article.

2014-2021 GMW & MA COLLEGE ATTENDANCE RATES  
By Gender

GRAPH 2

— Males in MA — Females in MA

— Males in GMW — Females in GMW



Graph 2 disaggregates regional attendance rates by gender for the period 2014-2021. Similar to the trends seen above, GMW attendance rates for both genders exceed those of the state overall. Moreover, females in both regions appear to be more likely to attend college than their male counterparts. When comparing males and females in Massachusetts for the academic year of 2020-21, the attendance rate difference was 8.8 percentage points; the GMW differential was similar whereby males are less likely to attend college than females. In the academic year 2020-21, the attendance rate difference in the Commonwealth was 8.8 percentage points. While consistently there have been more female attendees than males, the gap has been widening in the last two academic years. In the academic year of 2018-19, the difference in attendance rates in GMW was 6.3 percentage points and, in Massachusetts, the difference was 13.5 per-

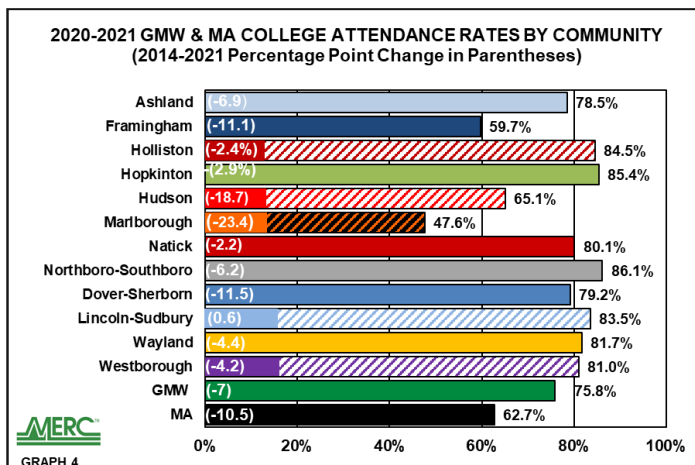
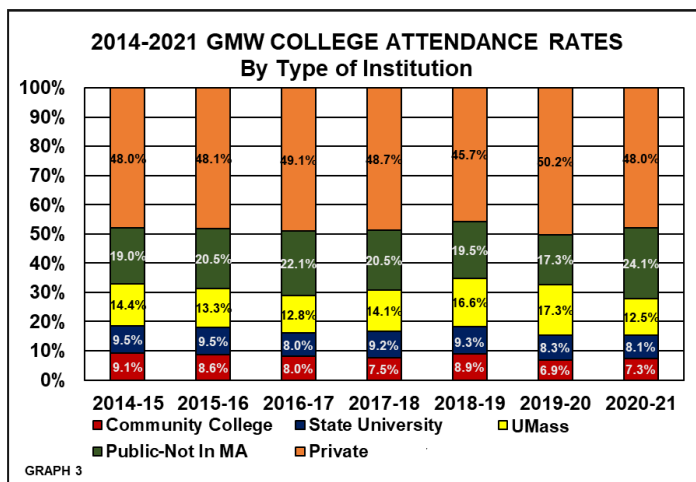
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centage points. More recently, in both GMW and Massachusetts, males were less likely to attend higher education than females.

Graph 3 represents the types of institutions GMW high school graduates have been attending over the last seven years. For the purposes of this graph, colleges/universities are being grouped into five major categories: Community Colleges, Massachusetts State Universities, UMass, other public higher education institutions not in Massachusetts, and private colleges/universities. Public institutions, whether in Massachusetts or elsewhere, have been the main destination for Massachusetts high school graduates, with an average over these years of about 51.7% of all the state's high school graduates. Massachusetts Community Colleges have accounted for an average of 8%, Massachusetts State Universities 8.8%, and the UMass system 14.4%, which is also the largest share of the state's public schools. Public colleges outside of MA have attracted on average 20.4% of the state's high school graduates during this period. Private institutions (both in Massachusetts and outside of the state) accounted for an average of 48.3% of graduates during this period. In the past three academic years, Massachusetts Community Colleges and State Universities' share has decreased by almost 7 percentage points from 34.8% in 2018-19 to 27.9% in 2021.

Delving deeper into the Greater MetroWest region reveals a set of different stories in terms of college attendance rates. Graph 4 represents the percentage of 2020-21 high school graduates who went on to attend college. It also includes the percent change from attendance in 2014-15 to 2020-21. Of the twelve GMW school districts considered here, nine had an attendance rate higher than 75% and surpassed the state average of 62.7% in the 2020-2021 academic year. While this speaks to the high levels of college attendance in the region, it is important to note that the two largest communities in GMW (Framingham and Marlborough) had the lowest attendance rates during that year. Marlborough's attendance rate was 47.6% or 121 students out of 254 graduates. Similarly, Framingham's attendance rate was 59.7% or 331 students out of 554 graduates. When it comes to percentage point changes in the attendance rate from 2014 to 2021 there have not been many positive notes. All but one GMW community saw their attendance rate decline, in some cases substantially. Lincoln-Sudbury was the only community to have a positive percentage point change since 2014. Its attendance rate increased by 0.6 percentage points as shown on the left-hand side of the bars on the graph. The biggest decreases in attendance rates took place in Marlborough, with a decrease of 23.4 percentage points, and Hudson, which decreased by 18.7 percentage points.



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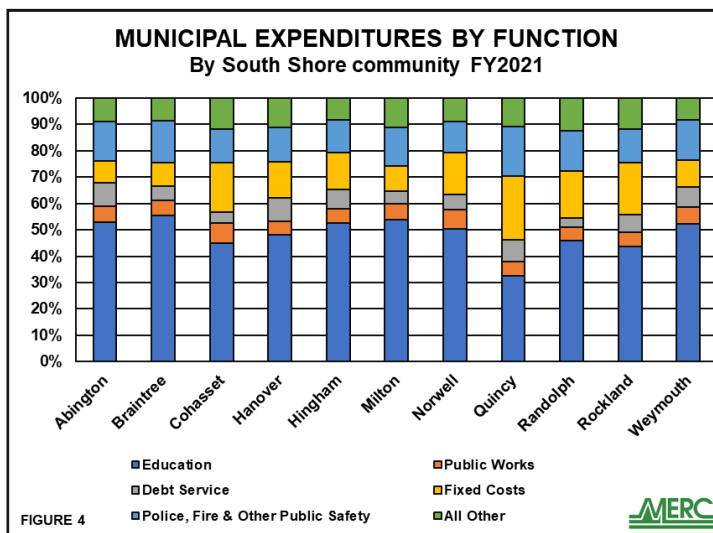
To conclude, both Massachusetts and GMW experienced marked drops in college attendance rates from the academic year 2018-19 to the academic year 2020-21. Males in MA are less likely to attend college than males in GMW, and also than females in both GMW, in MA. In the past seven years, MA Community Colleges and State Universities have seen their share of MA college attendees decrease. College attendance rates across the GMW communities vary significantly. Moreover, we see that communities like Marlborough and Hudson, with relatively low college attendance rates by GMW standards, experienced significant decreases during the 2014-2021 period. ■

Continued from page 2

Safety, and All Other. The five largest communities by expenditure collectively spent just over \$836 million or 69% of the Total General Fund Expenditure in the South Shore region. Randolph and Hingham had similar municipal expenditures both spending just over \$100 million in 2021. Quincy had the largest expenditure of all the communities in the SS spending \$335 million followed by Weymouth which spent \$152 million.

Figure 4 illustrates each community's expenditures by function as a percentage of their total municipal expenditure. Each community in SS spent the largest percentage of their total fund expenditure on Education. The South Shore region spent \$560 million or 46% of the total municipal fund expenditure on education in 2021. Six of the eleven communities in SS spent more than half of their general fund expenditure on education. The communities that spent 50% or more of their expenditure on education include Abington, Braintree, Hingham, Milton, Norwell, and Weymouth. Of all the communities, Braintree allocated the largest percentage of their expenditure on education spending just over 56%, followed by Milton that spent 54%.

Quincy spent the smallest percentage of their expenditure on education, contributing just under 33% of their funds to education followed by Rockland which allocated 44% to education. Although Quincy allocated the smallest percentage of their expenditure on education, 33%, Quincy spent the most money on education than another other community in South Shore. In Figure 3, it is observed that Quincy spent \$109 million on education. Weymouth spent the second largest amount on education allocating \$79 million. Cohasset spent the least amount of money on education, \$21 million, followed by Abington, \$26 million. ■



## MERC Interns: Fall 2022



Emily Gray



David Hyer Jr.



Juan J. Maquilon

Alex  
AversanoKamaris  
DesrochesMichael  
PalermoGilmer  
Zepeda-Recinos

## Past Interns: Where Are They Now?

**Courtney Schleyer**

**YOG 2021**  
**Major: Accounting**  
**One Semester**  
**with MERC**

**Associate**  
**Accountant,**  
**Samet & Company**

**Do you believe your experience at MERC help you get to where you are now? If yes, please briefly explain.**

The experience looks good on a resume.

Builds confidence in working with and analyzing real world numbers/issues that is almost never done in the classroom.

**What are some skills you acquired at MERC that you use to this day in your professional career?**

Familiarity with a remote work environment.

Greater knowledge on excel spreadsheet functions.

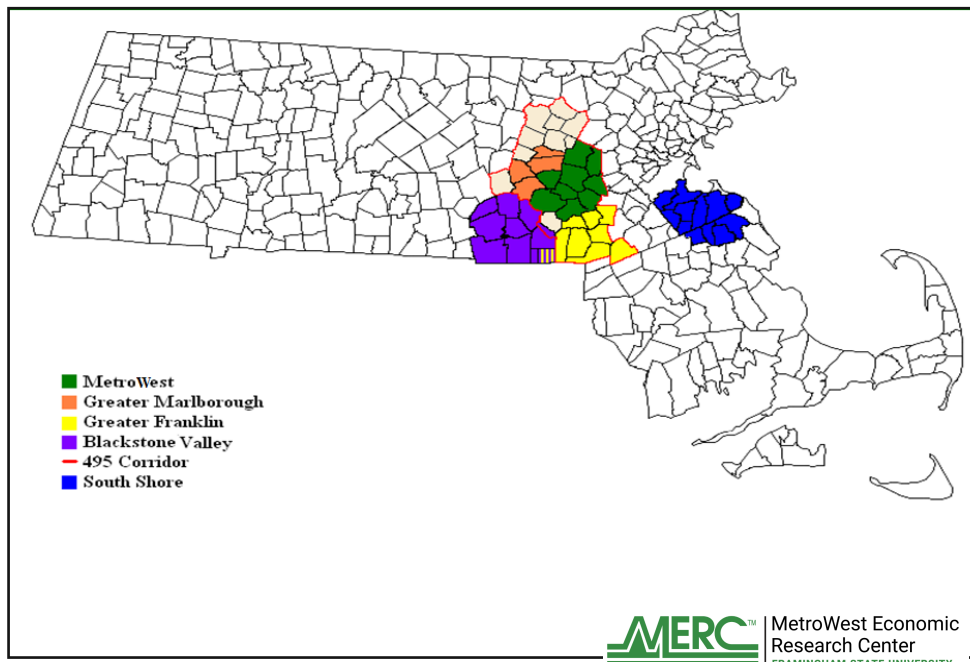
Independence, time management skills, responsibility.

**How would you describe your experience at MERC?**

My experience was both fun and interesting, as I got to analyze what was happening economically at the start of the pandemic. It was refreshing to use the skills I had learned from class and from the professors in this internship for a real use.

## MERC SUBSTATE REGIONS MAP

MERC provides economic data and analysis for the six sub-state regions shown on the map: MetroWest CCSA™, Greater Marlborough Region, Greater Franklin Region, Blackstone Valley, 495/MetroWest Corridor, and the South Shore CCSA™.



There are several categories of unemployment rates. U-1 through U-6, not seasonally adjusted, are reported below for the U.S. period rates in December 2022. MERC uses the U-3 rate, which is the official unemployment rate.

### Measures: U.S. December 2022

<b>U-1</b>	Persons unemployed 15 weeks or longer, as a percentage of the civilian labor force	<b>1.1%</b>
<b>U-2</b>	Job losers and persons who completed temporary jobs, as a percentage of the civilian labor force	<b>1.6%</b>
<b>U-3</b>	Total unemployed persons, as a percentage of the civilian labor force (the official unemployment rate)	<b>3.3%</b>
<b>U-4</b>	Total unemployed persons plus discouraged workers, as a percentage of the civilian labor force plus discourage workers	<b>3.5%</b>
<b>U-5</b>	(U-4) plus all other "marginally attached" workers, as a percentage of the civilian labor force plus all "marginally attached" workers	<b>4.0%</b>
<b>U-6</b>	Total unemployed persons, plus all "marginally attached" workers, plus all persons employed part time for economic reasons, as a percentage of the civilian labor force plus all "marginally attached" workers	<b>6.4%</b>

### December 2022 UNEMPLOYMENT RATES Not Seasonally Adjusted (Preliminary Data)

<b>495/MW</b>	<b>2.6%</b>
<b>Blackstone Valley</b>	<b>3.0%</b>
Blackstone	3.1%
Douglas	3.4%
Grafton	2.7%
Hopedale	2.8%
Mendon	2.4%
Millbury	2.9%
Millville	3.6%
Northbridge	3.6%
Sutton	2.7%
Upton	2.6%
Uxbridge	2.9%
<b>Greater Franklin</b>	<b>2.8%</b>
Bellingham	2.9%
Blackstone	3.1%
Foxborough	3.1%
Franklin	2.7%
Medfield	2.5%
Medway	2.5%
Millis	3.0%
Norfolk	2.5%
Wrentham	2.8%
<b>Greater Marlborough</b>	<b>2.8%</b>
Hudson	3.0%
Marlborough	2.9%
Northborough	2.9%
Westborough	2.5%
<b>MetroWest</b>	<b>2.4%</b>
Ashland	2.2%
Framingham	2.5%
Holliston	2.5%
Hopkinton	2.4%
Natick	2.3%
Sherborn	2.3%
Southborough	2.2%
Sudbury	2.4%
Wayland	2.2%
<b>South Shore</b>	<b>2.9%</b>
Abington	3.3%
Braintree	2.6%
Cohasset	2.2%
Hanover	2.4%
Hingham	2.6%
Milton	2.7%
Norwell	2.8%
Quincy	2.9%
Randolph	3.4%
Rockland	3.0%
Weymouth	3.3%
<b>MA</b>	<b>3.2%</b>
<b>US</b>	<b>3.3%</b>



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## SAVE THE DATE: 30th MERC Annual Conference Wednesday, June 7, 2023



Dr. Mark Melnik specializes in demographic, socio-economic, and labor market issues. His 20-plus person team works with such clients as the Massachusetts Gaming Commission, the Boston Foundation, the City of Boston, MassDOT, and MassDevelopment. In addition, Dr. Melnik serves as the Senior Managing Editor of MassBenchmarks, the journal of the Massachusetts economy. Dr. Melnik is quoted extensively in the media, served on Governor Baker's Future of Transportation Commission and sits on the Massachusetts Economic Development Council Board of Directors. He holds a doctorate in sociology from Northeastern University.

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