

***Research Survey on Effects of
Marcellus Shale Development on Communities***

Survey Results: Washington & Greene Counties 2013-14

***Environmental Law Institute
and
Washington & Jefferson College
Center for Energy Policy and Management***

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I. Survey Description

In the fall of 2013, the Washington and Jefferson College Center for Energy Policy and Management conducted a survey of 440 local officials in Washington and Greene counties in Southwestern Pennsylvania, the counties that are the locus of Marcellus Shale development in that region. The goal of the survey, which was entitled “*Research Survey on Effects of Marcellus Shale Development on Communities*,” was to elicit the reaction of these officials to the unconventional gas development in their area and to Pennsylvania’s Act 13, one of the purposes of which is to provide revenues to local governments to address the impacts of shale gas development. These officials, themselves longtime residents and acquainted with many, if not most, of the people in their community, provide us a glimpse of how people in the region perceive the shale gas development.

The survey, a 4-page questionnaire consisting of 16 questions (a condensed example of which appears here at the end), was conducted by mail, given that it was the most reliable way to reach all of the officials. The survey covers the period up to and including the third quarter of 2013, thus covering the first two rounds of Act 13 impact fee disbursement. The response rate for the survey was 20%. The survey respondents were given the choice to respond anonymously, but 60% of the respondents chose to identify themselves fully and another 14% identified at least their municipality. Of those respondents who included their geographic information, 79% were from Washington County and 21% were from Greene County, again, however, a full 40% of the total respondents were anonymous. Throughout our discussion, we will adhere to this anonymity because it allows officials the opportunity to express their opinions freely.

Prior to conducting the survey we interviewed Greene and Washington County Commissioners, along with a variety of other stakeholders, which influenced the content of the survey. We followed up the survey with interviews of these same Commissioners approximately one year later. Additionally, one on one interviews were conducted fall through spring (2013-14) with those municipal officials who had completed the survey and had expressed a willingness to speak at greater length on these issues. The results of these interviews are interwoven with our discussion of the survey results proper because they provide clarification of the results and serve to give a fuller picture of how local officials see the development and its impacts.

II. Overall Reaction to Marcellus Shale Development

Jobs

The first issue (question #1) to be addressed in the survey was the question of employment – had residents in their community obtained jobs in the natural gas industry; if so, what was the nature of their jobs; and if not, what did the officials believe were the obstacles to their obtaining employment there. The overwhelming majority of respondents, 80%, noted that residents had obtained work in the gas industry (15% answered “no” and 5% did not answer). The majority of jobs obtained, as reported by these officials, were concentrated in unskilled and skilled labor (55% and 16% respectively). The jobs most commonly noted were truck driver, security guard, and field/well hand. The next most frequently noted category (accounting for 16%) was professionals, including accountants, PR and sales, management, geologists, and engineers. The final category noted was landman/title searcher, accounting for 13% of the jobs obtained.

For the 15% of the respondents who reported that residents in their community had not obtained jobs, the reason most commonly cited was a lack of training or skills (30%). This was followed closely by a lack of interest by employers to hire local residents (25%), a lack of interest on the part of the local residents (20%), the inability of the local residents to meet employment requirements on a basis other than skills (15%), and finally the 10% citing “other” reasons noted that their population was either too old or too small. For example, citing an aged population, one municipal official explained, “Residents are older people and gas companies will not hire older people. Some residents have gotten jobs, but these people are not property owners.” This interviewee was not alone in mentioning out-of-town workers. The implication was that jobs have gone to transplants, as opposed to long-time residents of the area. Conversely, it also indicates that younger workers have moved into an otherwise moribund area and could potentially revitalize it. A county commissioner expressed this latter view, stating, “They’re not taking local jobs. [The development] is bringing in skilled, knowledgeable workers that understand the jobs and technologies. They can teach local residents, maybe move into the area and contribute to [our] county.” Another county commissioner added that the problem of jobs going to non-residents was resolving itself: “at first jobs went to out-of-staters, but now 7 out of 10 are held by locals.” Another municipal official explained, “in the beginning the industry wanted to hire local workers, but they were hampered by the drug problem.”

Regarding the issue of why some residents might lack interest in pursuing gas work, one official noted in an interview that some workers might not want to make a transition from the local coal industry to gas because of “the long hours and hard work” and “drugs – the very stringent drug tests.” Another Washington County official argued, “the challenge is with parents” not wanting their children to go into this type of work, but “this industry is creating more jobs that don’t require a college degree and compensation is flipping. A kid with a college degree can go into HR and make in the \$30s, but welders are making \$80-90,000! We are in the middle of a paradigm shift...this is a new industry to our area...and there are unknowns, but it tends to pay well and provides a multitude of opportunities...but the general public is often unaware of the opportunities that are actually available in the industry.”

It should be noted that even among those officials who answered positively regarding employment, 23% still noted that there were obstacles to their residents obtaining work, citing the same reasons as those who had responded negatively. These respondents noted that the employment picture was complicated by the fact that opportunities were few, mostly comprised of low paying job, unskilled jobs, involved lay offs once work (such as laying pipelines) was completed, and that the jobs obtained often went to “transplants from out of the region” who already worked in the industry and therefore had the requisite experience and training.

What these responses highlight is that the employment picture is complicated – while the overwhelming majority of areas can report increased employment, there is still a great need for training of local residents to help them make the transition to the new industry. There is also a need for work on the issue that a significant number of municipal officials perceive a lack of interest by operators in hiring local residents. Either the municipalities need to be more proactive in working with the industry to promote the case for hiring local people and working to resolve the reasons for the operators’ lack of interest or there is a misperception on the officials’ part and the industry needs to make it clear that they do want local workers.

Municipal Revenues

Question #2 asked officials to assess whether Marcellus Shale development had affected their municipality’s revenues, either positively or negatively, in what ways revenues had been affected, and if the effect had been positive how the municipality was using the new revenues. (It should be noted that officials were instructed to exclude from consideration Act 13 Impact Fees, but a thorough examination of the responses suggests that most respondents lumped impact fees together with other revenues emanating from the shale gas development and considered them as one whole.)

Overall, the number of respondents noting a positive impact on their municipal revenues was 44.7%. They noted increased tax revenues, particularly on earned income tax and real estate tax, monies from permit fees, and even money for gas developed on borough property. Common responses from this group are: “we are blessed to receive this money. Probably without it we would be over budget!” “Aside from new construction paid for by bonus checks and royalties, which will raise property values and property taxes, we got a one shot transfer of property from Consol to CNX that brought [our] township a one time windfall of 100 thousand.” “[We] now have some income to work with to better our township.” “This money is additional revenue for our small municipality [and has] enabled us to purchase a new police car;” and “Positive – more money to do projects that we would not be able to do otherwise.”

These municipal leaders also note a revitalization of their local economies “by industry employees buying homes, products and services from our businesses”; “increased water sales, fast food sales, hotel rooms, general business pick up;” and “it has expended billions of dollars in our local economy. These dollars are being spent at local businesses and eventually coming in to the municipality.” The county commissioners with whom we spoke supported this view of the

broader positive economic impact made by the industry. As one county commissioner stated in early 2014: “our biggest challenge is how to grow economically. We need to establish a greater tax base...we have seen economic growth as a consequence of Marcellus Shale development. Local businesses have seen a great increase in business, for example, an increase in the sale of tractors, the local small grocery store has seen a lot of activity, and a local men’s store in our community has switched to selling fire proof overhauls and other work gear. The past year has been the best they ever had...This bus in not coming through here again. We have to turn this development into real economic development! It’s upsetting that other counties are fighting this development. That only hurts us. If everyone understood the manufacturing opportunities that this natural gas offers they would not fight it.” Another county commissioner echoed these thoughts, saying, “it’s our turn...we are going to make something out of this.” A Washington county official concurred, “I don’t see the downside economically. Washington County has had the greatest county growth in America. Community psyche has altered incredibly. There is a sense of pride, where before it was an economically depressed area.”

All officials noting a positive impact reported that the extra revenues were used most frequently on infrastructure improvements: repairing/rebuilding roads and other public works improvements; purchase of public works equipment, general operating expenses; installation of water lines; fire protection funds; and increased police protection. In other words, most revenues were immediately expended on community maintenance and development

Admittedly, not all respondents noted a positive effect on their municipality’s revenues. 32.9 % of respondents noted no impact on revenues. 9.4% noted a mixed impact and 8.2% noted an overall negative impact. Invariably, those citing a mixed impact explained it as did one official: “revenues have increased significantly, but expenditures have also increased.” The expenditures most frequently cited are repairs for roads destroyed by heavy trucks and sharply increased traffic. As one official explained it, “because the use is increased – basic maintenance of affected roads is increased. Thus, most additional funds are depleted by this activity.” For those noting a negative impact on revenues, the most commonly cited reason was that additional revenues were dwarfed by the increased expenditures on services. As one official put it, “We’ve gotten no additional revenue, but the services that are provided have increased, such as: police, road crew, and management involvement.”

Our interviews with officials clarified the reason for this great divergence in opinion. On the county level, both counties benefitted enormously, but at the municipal level not all municipalities have benefitted equally. Some have had direct well development and thus more generous impact fees and other revenue growth. Other areas have received impact fees, but little of the impacts as they have no development. And others are surrounded by development but have no wells and not enough of a population to generate impact fees, and thus received mostly impacts and little revenue to offset them.

Changes to the Municipality

Questions #6 and 7 on the survey dealt with whether the local government had made any personnel changes in response to Marcellus Shale development (additions, changes in duties, new committees, etc.) or had begun to provide additional services to its community. Regarding personnel, the overwhelming response was negative: 94% responding that no personnel changes had been made with only 6% noting additions of personnel. With regards to additional services, answers were also mostly negative (with 80% noting no additional services, 18% answering affirmatively and 2% providing no answer).

A closer examination of the comments reveals, however, that even though personnel didn't increase, duties and services provided did – even among those who had answered negatively. There are two notable exceptions, where extra help was acquired: one municipality which hired an additional part-time police force, and another which reported that it had contracted with an outside road engineering company to inspect roads. Otherwise, the other communities were simply doing more work, providing the same type of services but more of it, with the same number of people. These responses bear this out: “supervisors, now have hearings on unconventional wells drilled instead of Zoning Board, to be in compliance with Act 13;” “road master spends more time on complaints by residents (from drilling activity) than on road work as before drilling came,” and “one or more employees [now] deal with gas related issues daily;” our “planning committee is working more.” The most common additional services cited were: road repairs and increased police protection.

Most Difficult Impact

Question #8 of the survey asked respondents to rate which impacts from Marcellus Shale development they considered to be the most difficult to address and why. Not surprisingly given the earlier answers, the impacts most commonly cited were road damage (33%) and traffic (26%), followed by noise from compressor stations (at 8%). The next complaints (each garnering 5-6% of answers) were: public opinion/keeping the public informed; dust; environmental impacts; and dealing with Act 13 rules. The impacts cited least frequently (1.6% all) were: water quality; air quality; public health; lack of preparation for development; dealing with the pace; impacts to human services and community discord. What is, perhaps, most interesting here is that the impacts most frequently cited in the press in relation to Marcellus Shale development actually rank rather low on the list of what officials in the communities rate as most difficult. Moreover, it bears noting that in interviews several officials put these impacts in perspective. For example, “the impact is positive more than negative. There’s noise, dust, and traffic, but benefits. There’s a new surface coal mine and stone quarry near us and there’s more impact from that blasting and shaking the houses than there is from the gas development.”

As regards the focus on roads and bridges, it is logical for the municipalities to focus on these because as one county commissioner noted “for municipalities it’s roads...the supervisors spend a lot of time on the local level taking care of roads.” It is one of their central responsibilities and many of the locales had infrastructure that was already in poor condition, and then was strained further. The growth of traffic in many of these areas has been dramatic. As an example, one municipal leader explained that traffic in their rural area had increased twenty-fold, “whereas

before in a 24 hour period you might see 5-6 vehicles now you see 100+ vehicles in the same 24 hour period” in an area with 58 miles of gravel roads.

Relationship with Industry

Questions #13 and 14 of the survey dealt with the locale’s relationship with the gas industry. The first addressed whether or not the municipality has been involved in any conflict over Marcellus Shale development. The majority of respondents (72%) answered that they were not involved in any conflict with the industry. Among those responding affirmatively regarding conflict (23%), the most commonly cited issue was damaged roads and bridges. Several respondents did note that their municipalities were part of the group that challenged Act 13, however they did not mention direct conflict with the operators.

Question #14 addresses how each municipality communicates with both the industry and the public regarding Marcellus Shale development. The largest single group (27%) responded that it communicated directly with the industry via phone, email, and one-on-one meetings and handled matters as they arose. 21% cited public meetings where industry reps were frequently in attendance. 7% of communication is done via media (including magazines and websites). Only 6% of areas cited no communication whatsoever.

As regards the officials’ satisfaction with the level of communication, very few made negative comments, suggesting that most found it satisfactory. This was borne out in our interviews with municipal officials – most of whom reported a good working relationship with the operators. As one municipal official stated, “we have a good relationship with the companies...they’re better than the loggers. They’re responsible about the roads. They’re good neighbors.” Another Washington county official also felt the operators were responsive. As an example, he cited an instance when he called an operator at 9:00 p.m. about a matter caused by heavy rains and there was a crew on site to address the problem by 8:00 a.m. the following morning.” One official from a municipality with a significant amount of gas development explained that the relationship with the operators had developed over time: “It’s been a learning experience and there were growing pains! The industry has improved a great deal, but it’s taken a lot to get there. Now we have much better communication.”

Even among those who cited a good relationship, though, a common request was for operators to provide more information regarding their plans for activity, as this would allow officials to plan accordingly. A Green County official explained, “I think the only strain is figuring out how to handle any type of accidents...to properly notify emergency services when roads are closed down. Sometimes the drilling companies close down roads to do work and don’t notify the county/township, that is such a risk...how can emergency services get to people?” A county commissioner echoed this concern, referring to accidents on the sites, saying “we need more contact between us and operators so we can tell emergency responders where to go.” Another commissioner suggested a “one-stop number where we could call to resolve problems” – this in light of the fact that many companies are involved in the areas (contractors and a multitude of

sub-contractors), and sites often changed ownership, such that county and municipal officials sometimes did not know to whom to direct issues.

III. Reaction to Act 13

Adequacy of Impact Fees

The next section of the survey concerned Pennsylvania Act 13, one of the purposes of which was to provide funds to areas to address the impacts from unconventional gas development. The goal of this portion of the survey was to determine as much as possible whether these local officials have found Act 13 and the fees to be an adequate mechanism for addressing the impacts occurring in their communities.

The first question (#3) asked whether the respondents consider the fees received in 2012 and 2013 to be adequate to address the impacts and if they are not adequate which impacts could not be addressed. 22% responded that the Act 13 fees were inadequate, the most commonly cited problem being road damages that could not be addressed with the amount provided. The majority of respondents (65%) noted that the fees were adequate to address the impacts, but a significant number added that while the fees are currently adequate it was not clear if they would be in the future. As one official remarked, “the fees are enough for the time being – probably not in the future.” Another remarked, “at this time [they are enough]. But as the industry’s future is uncertain it is too soon to tell.” Others noted that the fees were enough only because development was still limited or had not reached their area. A county commissioner observed early on, “we are hopeful that the fees will continue, but are cautious in recognizing that they could end abruptly.”

In interviews, most officials expressed the belief that shale gas development would continue and grow, and along with it the impacts, and there was a worry that the fees would not keep pace. This was particularly the case because many we interviewed anticipated that their fees would decrease in the upcoming round of disbursements. There was concern about the current structuring of the fees, many noting that communities with few impacts had received more than some areas with greater levels of impacts. For example, one small Washington County community had received only \$16,000 (because they had no wells and a small population) but was completely surrounded by development and experienced significant traffic and other impacts. Some we interviewed also worried that future changes to the fee structure might disadvantage the municipalities even further. For example, one official queried, “all the candidates for governor want to do an excise tax on the gas industry. We only get 1/3 of the impact fees now and the state gets 2/3. Would that mean we would get even less as the state government gets more?”

Question #4 asked whether the communities are experiencing impacts that are not covered by Act 13, and if so what they are. 80% of respondents answered negatively, i.e. they feel that there are no impacts not covered by Act 13. This suggests that the Act was reasonably well formulated in

this respect. A small group (9%) felt that there were additional impacts – again citing principally those from vehicles: damaged roads, traffic (frequently speeding), noise and dust. 11% of the respondents did not answer this question.

Overall, the principal dissatisfaction with the impact fees is less what impacts they cover and more the amounts and whether the money was equitably distributed among the municipalities.

Spending Impact Fees

Question #5 of the survey addressed the issue of how local governments reach decisions about spending their Act 13 Impact Fees. This question was designed to elicit information about the process and how much public input was integrated into the decision. Most of the answers regarding the process for decision making suggest that in general the local governments do not have a special process for determining how to spend the fees. They decide on spending them in accordance with their typical budgetary process – voting on them at regular meetings. The variety of answers simply point to which municipal body handles the decision-making. The most commonly cited body was the Borough Council. As concerns public input, 6% noted that decisions were made at public meetings and that public input was considered.

An issue that came to the fore in the interviewing process was a discernable split not so much in how the locales decided on spending, but in what they regarded as the best use of the fees. For example, many areas treated the fees not as special monies, but simply as additions to their general fund, a supplement to their general budget to be used to fill budget gaps. However, some officials argued for regarding the fees as an opportunity to accomplish special projects for the county/municipality. This split was particularly clear on the county level. As one county commissioner noted, “[we do] not put any money into operational support...not for salaries...[that] leads in the long run to debt and the need to cut programs.” His concern was these funds not be used to bridge the gap between this budget year and the next, but that they be reserved for special long-term needs and opportunities. Generally, however, Greene County officials argued for using the monies immediately, putting them into infrastructure projects such as water and sewer line upgrades and bridge repairs that would help their county grow and develop. One official explained, “for me I think my opinion would be to spend only because the need is so great now. There has been deferred maintenance for things put off in the past. The need is too great to justify saving.” And another commented, “We need water lines and sewer lines [upgraded]. If we don’t have that, we can’t expand and then there goes taxes.” In essence, both approaches are focused on the future – one emphasizes saving, the other spending to lay the groundwork for future growth.

In terms of actual spending of the fees, according to submitted PUC forms, Greene County spent 55.26% of its initial impact fee revenue on public infrastructure, 22.36% on public safety, 19.15% on social services and 3.23% on records management. Greene County decision-makers placed no impact fee revenue in a capital reserve fund. In contrast, Washington County chose to save 28% of their impact fees and the municipal governments in both Washington County and Greene County saved on average 53% and 54% of their impact fees respectively.

Operators Before & After Act 13

In the next set of questions regarding Act 13, our goal was to elicit whether or not Act 13 had changed how the operators dealt with impacts in the communities. Question #10 asked whether, prior to the impact fees, the operator corrected or compensated for corrections to impacts and if so what types of impacts they addressed. 41% of respondents answered no, i.e. the operators did not correct or compensate for impacts. Another 28% did not answer or indicated that the issue was not applicable. 31% responded that the operators did correct/compensate for impacts. Again, the overwhelming majority of impacts cited were road repairs. Some respondents did feel that the gas industry was more responsive to impacts prior to enactment of Act 13. As one put it, “In my opinion they are more reluctant to repair damages after Act 13 because they seem to think that the Act gives them license to damage without compensation.”

Question #11 asked respondents whether operators continue to correct/compensate for impacts since enactment of Act 13, and if so for what types of impacts. 40% responded no, i.e. the operators are not continuing to correct/compensate for impacts. 25% responded that they are continuing to correct/compensate (35% cited N/A or gave no answer). It should be noted here that even among those stating that the industry was continuing to correct/compensate, a number reported that road repairs (again the impact most often cited) are not handled in a timely fashion or without vigilance on the part of the communities.

The results from these two survey questions are not entirely clear. That 28% did not answer the first question and 35% did not answer the second question suggests that there was some confusion. In the interviews with municipal leaders, most responded that in terms of roads the operators continued much as they had prior to Act 13, i.e. for those whose roads were not bonded, they tried to work with the operators on a case by case basis to get damages addressed – and they got results; and for those whose roads were bonded – the mechanism was already in place for damages to be taken care of.

As regards their dealings with the operators, perhaps the most revealing remarks come from those officials who have dealt with several different operators. They reported that before and after Act 13 some were responsive to community complaints/ requests and some were less so. This answer goes some distance towards explaining how different communities can report such different experiences. What this suggests, though, is that there is a need to ensure that impacts are addressed by all operators. For example, measures to ensure that more roads were bonded, thus requiring the operators to do or fund repairs, would ease the situation.

IV. Other Strategies for Dealing with Impacts

In this final group of questions we hoped to elicit ideas and information regarding what the communities can do moving forward to deal with the changes and impacts in their communities.

Potential for Collaboration

Question #9 asked whether respondents thought it might be productive to collaborate with another municipality, or county, to combine Act 13 impact fees to address an impact; and if so – regarding which impacts. On this issue, 64% responded that they did not see the potential for collaboration. One county commissioner criticized this reticence on the part of most of the communities to pool their funds, remarking, “the municipalities need to combine their efforts in spending impact fees! It would increase their buying power.”

22% responded “yes” or “possibly” regarding collaboration. Among this latter group, the impact cited most often was road repair (particularly of roads spanning two townships or the co-operative purchase of road equipment). Other potential areas for cooperation noted were: police, fire and emergency services; help with water systems; and job creation. Several respondents, who did not necessarily see the potential for pooling funds, did see the benefit of “consulting with other townships on issues concerning ordinances and strategies to lessen impacts” or “reviewing their dealings with drillers. So as to have solutions ready before problems arise.”

Other Funds

Question #12 asks officials whether there are any other funds (aside from tax revenues and Act 13 Impact fees) available to them to help finance correction of Marcellus Shale development impacts. The majority (65%) responded no on this issue, though some of these indicated that they just didn’t know. 32% did not answer or noted that it was not applicable. 3% of the respondents answered affirmatively. The funds they noted were principally casino funds.

The issue of the availability of other funds is clearly one where municipalities generally need more information. One community in Washington County reported using a portion of their impact fees for strategic economic planning services, using a professional planner. This group, as part of their development study, had provided information on grants that are available. The municipality recently applied for funding to cover more comprehensive planning. Funds are available, but municipalities are not always aware of them.

Need for More Information

Question #15 asked respondents whether they want more information on some particular aspect of Marcellus Shale development and if so what? 61% of the respondents noted that they did not have any such issue. 26% of the officials, however, did express a desire for more information. Fundamentally, the topic cited most frequently was environmental impacts: water quality; air quality; effects on farmlands and livestock; and long term health issues. Regarding water issues,

one commissioner stated, “I don’t think some people understand water and documenting water problems...People complain that now their water smells but you have to have proof of contamination and we need to promote education regarding testing to maintain proof.” Another county commissioner suggested that there needed to be state enforced monitoring of cisterns, wells, and springs. Respondents also cited a need for information about legal issues, including the rights of municipalities and individual property owners. Officials also asserted the need to be better informed about the plans the industry has for development, as noted earlier.

Innovative Ideas

The final question in the survey #16 asks respondents to tell us if they have any innovative approaches to dealing with impacts from the Marcellus Shale development. The vast majority (80%) noted that they did not have any such strategies. Of those that did answer affirmatively, the following strategies were cited: the use of truck scales in police traffic enforcement; new ordinances for drilling and seismic testing and an ordinance requiring 7 acres of land before putting in a well; and a system for notification of road usage and a time table.

In interviews, one Washington county municipality noted that its planning commission was looking at what other areas were doing and were discussing establishing barrier areas for schools and homes (as a consequence of the Greene County well blowout). They also noted that the PA State Association of Township Supervisors has an excellent website (psats.org) with a good deal of useful information and that at its convention there was a lot of discussion about the use of impact fees.

Research Survey on Effects of Marcellus Shale Development on Communities
Washington & Jefferson College
Center for Energy Policy and Management

Directions:

1. We are conducting this survey to assess the impacts of Marcellus Shale development on southwestern PA communities. Impacts can be positive or negative. Please consider both in responding to the questions.
 2. If you are unable to answer a specific question, or questions, please leave the question(s) blank, but answer the others.
 3. PLEASE RESPOND BY NOVEMBER 15, 2013.
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1. Have residents of your municipality obtained jobs in the natural gas industry?

yes no

If they have, please identify the types of jobs they have obtained.

If they have not, please identify what you believe are the principal obstacles to their obtaining these jobs? (Please check all that apply)

- Lack of training/skills
- Lack of interest by employers to hire local residents
- Inability of local residents to meet employment eligibility requirements (other than skills)
- Lack of interest by local residents
- Other (Please describe)

2. Apart from the Act 13 Impact Fees, has Marcellus Shale development had any effect, positive or negative, on your municipality's revenues?

yes no

If it has had an effect, in what ways have your municipality's revenues been affected?

If the effect has been positive, how have the new revenues been used?

3. Are the Act 13 Impact Fees that your municipality received in 2012 and 2013 adequate to address the Marcellus Shale development impacts that your municipality experienced?

yes no

If they are not adequate, what impacts could not be addressed with the Impact Fees?

4. Has your municipality experienced, or is it experiencing, any impacts of Marcellus Shale development other than those identified in the list of thirteen authorized uses of the Act 13 Impact Fees?

yes no

If your municipality has experienced or is experiencing other impacts, what are these impacts?

5. What process does your municipality use for deciding how to spend your Act 13 Impact Fees?
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6. Has your municipality added any positions, changed any job descriptions, added any committees, or changed any committee charges in response to the Marcellus Shale development?

yes no

If changes have been made, please describe them and describe why the changes were made.

7. Has your municipality provided, or is it providing, any additional services to your community as a consequence of the Marcellus Shale development?

yes no

If additional services have been provided, or are being provided, please identify what those additional services are, and identify the time frame when they have been or will be provided.

8. Of the Marcellus Shale development impacts that your municipality has experienced, which ones do you consider the most difficult to address? Why? _____

9. Are there instances where you think it would be productive to collaborate with another municipality, or a county, to combine your Act 13 Impact Fees to address a particular Marcellus Shale development impact?
 yes **no**
If you think it would be productive, please identify which impacts lend themselves to this process.

10. Before the Act 13 Impact Fees were distributed, did the operators who conducted Marcellus Shale development activities in your municipality correct, or compensate you for correcting, Marcellus Shale development impacts?
 yes **no**
If they did, what types of impacts did they address?

11. Have the operators continued to correct, or compensate you for correcting, impacts of Marcellus Shale development now that your municipality is receiving the Act 13 Impact Fees?
 yes **no**
If they have, what types of impacts have they corrected or compensated you to correct?

12. Aside from routine tax revenues and the Act 13 Impact Fees, are there any other funds, such as matching grants, available to your municipality to help finance correction of Marcellus Shale development impacts?
 yes **no**
If there are funds, please identify them.

If any of these funds require an application, have you filed the application?
 yes **no**
13. Has your municipality become involved (either as a party to the conflict or as an observer) in any conflict over Marcellus Shale development?
 yes **no**
If it has, what was the nature of this conflict and has it been resolved?

14. How does your municipality communicate with both industry and the public concerning Marcellus Shale development?

15. Are there any aspects of Marcellus Shale development (such as certain legal issues or particular laws or environmental impacts) that you wish you had more information about?
 yes **no**
If there are, what would you like to learn more about?

16. Has your municipality implemented any innovative strategies for addressing the impacts of Marcellus Shale development?
 yes **no**
If you have implemented any innovative strategies, please describe them.

If you would like to provide your name and/or identify your municipality, please do so in the spaces below. **It is not required.** We will hold any identifying information in the strictest confidence and will not disclose it in any of the research publications in which the survey information itself is used.

Name: _____ Municipality: _____

On behalf of Washington & Jefferson College, thank you for your time in completing this survey. We greatly appreciate your participation. Please return the completed survey to Dr. Leslie Dunn at W&J College, 60 S. Lincoln Street, Washington, PA 15301, using the enclosed self-addressed and stamped envelope.