Executive Director
William J. Simmons

SYRACUSE HOUSING AUTHORITY

Building Neighborhoods. Growing Dreams.

Main Office

October 14, 2021

Mark Frechette, P.E.
Project Director
New York State Department of Transportation, Region 3
333 East Washington Street
Syracuse, NY 13202

RE: The I-81 Viaduct Project Comments to the Draft Environmental Impact Statement

Dear Mr. Frechette:

The Syracuse Housing Authority ("SHA") has reviewed the NYSDOT's Draft Environmental Impact Statement ("DEIS") and the environmental justice (EJ) analysis prepared for the I-81 Viaduct Project that has chosen the Community Grid Alternative.

Although SHA is in support of the community grid alternative there are some concerns that SHA has regarding the impact that the construction phase of the project will have on our residents, our operations and our employees. SHA residents are part of an environmental justice population and therefore NYSDOT must demonstrate that SHA residents would not be subjected to a disproportionality high level of adverse effects, in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23.

There are over 500 residents that live in Pioneer Homes immediately adjacent to the viaduct and about 300 residents that live in Toomey Abbott Towers. In the NYSDOT's Draft Environmental Impact Statement (DEIS), the Table 4-7 titled "Measures to Minimize Community Impacts" does an adequate job of assessing the critical technical areas that need to be considered throughout deconstruction and construction of the project. However, it does not address how to help residents with the health impacts they may encounter throughout the project.

Please see the attached document titled "I-81 Construction Health Impacts: Recommendations for Syracuse Housing Authority" that delineates the recommendations of SHA for pre-construction, construction and post construction of the I-81 Viaduct Project. The recommendations were drafted with the Upstate Medical University Working Group. In addition, from input from residents and the community SHA is also seeking voluntary housing vouchers for residents and 130 units of replacement housing to protect the health and well-being of SHA residents during the construction of I-81 Viaduct project.

Sincerely,

William Simmons
Executive Director

Toomey Abbott Towers is a 23 story high rise building located at 1207 Almond Street, that houses 308 units of elderly and disabled residents. Sixty Five (65) of the Three Hundred and Eight (308) units in Toomey Abbot Tower consist of a licensed Assisted Living Facility that is run by the ERIE program and is licensed under the Onondaga County Health Department. **Pioneer Homes** is a neighborhood of 597 families. 144 of those families (325 residents) live on the East side of the I-81 viaduct in close proximity to I-81. Tyler Court and Stewart Court to the West of the I-81 Viaduct are also immediately adjacent to the I-81 viaduct and consist of 108 families (181 residents).

I-81 Construction Health Impacts: Recommendations for Syracuse Housing Authority

[with cost estimates]

Contents

This document was developed by the following SUNY Upstate Medical University work group:

- **Dr. Jerrold Abraham -** Professor of Pathology, Professor of Family Medicine, Director of Environmental/Occupational Pathology
- **Dr. Judith Crawford** - Visiting Researcher of Pathology
- **Dr. Margaret Formica** - Associate Professor of Public Health and Preventive Medicine,
- Associate Professor of Urology
- **Dr. Auyon Ghosh –** Associate Professor of Medicine
- **Dr. Travis Hobart -** Assistant Professor of Pediatrics, Clinical Assistant Professor of Public Health and Preventive Medicine
- **Dr. Michael Lax -** Professor of Family Medicine, Professor of Medicine, Professor of Public Health and Preventive Medicine, Medical Director of Occupational Health Clinical Center (CNY)
- **Dr. Paula Rosenbaum** - Associate Professor Emerita of Public Health and Preventive Medicine
- **Dr. Dana Savici -** Associate Professor of Medicine, Division Chief of Pulmonary/Critical Care
- **Dr. Ahmed Shawkat -** Assistant Professor of Medicine
- **Gregory Siwiniski -** Adjunct Instructor of Family Medicine
- **Sarah Trapani -** Project Manager for Office of the President
- **Linda Veit** - Assistant Vice President of Community Relations, Interim Chief of Staff for Office of the President

Overview

SUNY Upstate Medical University (UMU) has convened a work group to develop recommendations for Syracuse Housing Authority related to preventing, minimizing, monitoring, assessing, and if needed, treating, any health conditions that could arise or worsen for Syracuse Housing Authority residents impacted by the planned I-81 deconstruction and construction project. The SUNY UMU work group consists of physicians (family medicine, internal medicine, occupational health, pathology, pediatrics, and pulmonology), public health practitioners, and researchers.

The Syracuse Housing Authority residents that will be impacted are those that live at:

- Toomey Abbot Towers - approximately 300 elderly disabled
- Pioneer Homes – approximately 500 adults and children (immediately adjacent)

Possible health risks identified include:

- Displacement of local residents from their homes and community
- Exclusion of local community members from planning and implementation
- Respiratory issues
- Audiology – noise effects
- Sensory-vibration effects
- Exposure to toxic substances – e.g. lead
- Accidental injuries
- Mental health issues
- Access to services
- Disruption of medical care due to proximity of construction to Upstate
- Lack of adequate resources to ensure the health of the community

Major components of the construction project that must be considered include:

- Air Pollution and Particulate Matter (Respiratory issues)
    - Construction activities are major contributors to dust pollution due to the usage of raw materials like sand, silt, cement, concrete, sawdust, etc. and activities like excavation, drilling, bulk material transportation, loading and unloading, open-air material storage, concrete and mortar making, cutting and filling, and the movement of equipment. If unattended, particulate pollution is bound to surpassingly increase having greater health implications on laborers and workers at these sites, and in this case, Residents living nearby.
- Noise Pollution (Audiology issues)
    - Noise pollution can cause harmful effects on human health. Various studies have shown that approximately sixteen percent of worldwide disabling hearing loss was due to occupational noise. Noises can occur from machinery or construction such as piling, welding, knocking, hammering and material transportation.
- Vibration (Sensory-Vibration effects)
    - Exposure to excessive vibrations can cause health risks to workers and to the community members in the immediate area. Use of anti-vibration products should be considered (rollers, dampers, rubber compounds, etc...).
- Impact on Mental Health and Wellbeing of Residents
    - The mental health needs of the community residents during construction need to be considered especially in a vulnerable population, who rely on walking and public transportation. The stress of daily living near a construction site and the potential disruption of access to vital services also need to be considered.

In the DOT Draft Environmental Impact Statement (DEIS), the Table 4-7 titled “Measures to Minimize Community Impacts” does an adequate job of assessing the critical technical areas that need to be considered throughout deconstruction and construction of the project. However, it does not address how to help residents with the health impacts they may encounter throughout the project. Our experts have provided additional recommendations to address these issues.

Pre-Construction Recommendations

Initiatives for Pre-Construction Phase

Recommendations		Details
1.	**Health Impact Assessment (HIA) [pre-construction]** Purpose: To determine the current (baseline) health status/needs of the community. *Estimated cost: $10k – $200k, possibly more depending on scope*	• Possible collaboration with Onondaga County Health Department for existing data (e.g. Onondaga County Health Assessment and Improvement Plan) • Specific considerations given to children, elderly, and disabled who might be more at-risk of health impacts from construction • Focus on environmental justice and equitability
2.	**Revision of problematic construction plans** *Estimated cost: unclear costs*	• Roundabout, while an improvement over the prior plans, is still too close to STEAM at Dr. King elementary school, in contradiction to EPA guidelines regarding distance from schools (>600 feet) • Assure adequate safe access to community grid from all areas of the neighborhood by including walkable access and roadway crossings for certain areas
3.	**Heavy equipment guidelines for Department of Transportation (DOT)** *Estimated cost: unclear costs*	• Establish independent monitoring guidelines for construction phase • Upgraded list of controls • Incorporate Prevention through Design & Planning principles to address relevant health exposure risk to community and workers. • Include Best Available Technologies to remove source exposures such as quiet equipment, dust-less processes, etc.
4.	**Resident focus groups and/or survey** *Estimated cost: $4k-$12k*	• Facilitated discussions at each impacted housing establishment • Focus groups should occur prior to the distribution of a health survey • Concern for overburdening residents with too many surveys, etc. with assurance that their needs and concerns are addressed • Determine best methods for community/resident input into construction process and outcomes and community health • Develop an environmental health registry with community input (to monitor short and long-term health issues and facilitate access to health services)
5.	**Educational sessions for residents** *Estimated cost: $3k*	• Information on what to do if a health issue occurs • Information on residents' rights related to the construction

Active Construction Recommendations

Initiatives for during Active Construction Phase

	Recommendation	Details
1.	**Access to health services** *Estimated cost: $1 million*	• Development of an on-site health clinic at Toomey Abbot Towers staffed by experts to provide prompt virtual and in person care. This would be a full-service clinic with physicians, APPs, nurses, respiratory therapist to run a spirometer (~$2000) along with the project coordinators and community navigators. Services should include primary care, pulmonary care, audiology services, and occupational health. • Ensure access to Upstate and other health related services remain available and easily accessible during the project. • Continue to monitor and assess residents' health (environmental health registry – see below)
2.	**Access to mental health resources** *Estimated cost: unclear costs*	• Availability of mental health resources in on-site health clinic. • Phone hotline for mental health concerns
3.	**Educational sessions for residents** *Estimated cost: $3k*	• Information on how to avoid specific health issues, e.g. remove shoes in home to avoid tracking lead into the house • Information on what to do if a health issue occurs • Information on residents' rights related to the construction
4.	**Stringent adherence to construction and health controls** *Estimated cost: unclear costs*	• Independent monitoring with ability to stop construction if thresholds exceeded
5.	**Air quality monitoring and safety** *Estimated costs:* • *$300 per handheld spirometer unit, up to $10,000 plus operating costs for stationary, highly accurate unit* • *$1000 per 100 flow meters* • *$250 per AirBeam device, with possible additional cost if phones are needed.* • *$9000 - $15000 per PM 2.5, fine particulate matter monitoring instruments suitable for indoor and outdoor use, with annual calibration costs of $800*	• Air filtration systems • Air conditioning units in SHA homes and buildings • Air quality monitoring system in and near residents' homes; possibly connected to their phone app. • Handheld spirometers for residents • Peak flow meters for residents • Air quality/particulate matter devices suitable for residents and community members that measure PM2.5 (fine particulate matter) in units of micrograms/cubic meter. *Note: Recommended product is the AirBeam (www.habitatmap.org). was developed for participatory community air monitoring and is probably the most applicable device. It fits in a pocket or backpack, can be set up indoors or outdoors for in-home or mobile monitoring. It is used with an Android phone and the AirCasting App. Measurements are recorded and mapped in real time and synched to the cloud where they can be viewed at the AirCasting.org website. Results are compared with a color-coded scale EPA has developed to indicate health risks. The device is $250. If phones are needed, that is an additional cost.* • Specific attention given to STEAM at Dr. King Elementary School and Wilson Park to protect children and other vulnerable populations
6.	**Sound monitoring and abatement**	• Sound proofing windows

Recommendation		Details
	Estimated cost: • *$500-$1k per monitor* • *$5000 for professional sound level meter with yearly cost of $500 for factory calibration. Plus personnel costs for managing that program*	• Sound monitoring system in and near residents' homes; possibly connected to their phone app. *Note: Professional sound level meters with good accuracy and sensitivity come at high cost and require maintenance, calibration and training. Even low-cost, lower accuracy devices need the same. The most realistic approach to personal sound level measurements for residents or community members is through a smartphone and sound level meter apps. There are numerous, free, sound level apps that use the smartphone microphone and provide a reasonable screening tool for noise monitoring. Measurements would be stored only on the individual phone, not on servers as this is not a typical feature of the apps reviewed. There are different apps for IOS and Android phones including a NIOSH (National Institute for Occupational Safety and Health) app for IOS that is highly rated. Recommendations for the best apps for could be developed and some type of instruction or training provided for users.* • Provision of meaningful noise abatement options to residents. For additional guidance and recommendations, refer to: https://www1.nyc.gov/assets/dep/downloads/pdf/air/noise/construction-noise-protocols-vendor-guidance-sheet.pdf • Specific attention given to STEAM at Dr. King Elementary School and Wilson Park to protect children and other vulnerable populations
7.	**Strict control practices when dealing with toxic substances, as well as both environmental monitoring and active surveillance of nearby residents when appropriate.** *Estimated cost: unclear costs*	• Lead paint and lead in soil, including surveillance of blood lead levels of nearby residents, particularly children • Asbestos hazards • Silica • Particulate matter • Diesel exhaust • Hazardous waste (legacy sites)
8.	**Develop *independent and confidential* reporting process for residents' health issues, such as an environmental health registry** *Estimated cost: unclear costs* (Flint, MI registry = $14+ million; World Trade Center = $23.5 million)	• Standardized mechanism for SHA residents to report construction-related health issues • Guidelines for what residents should do if they experience construction-related health issues • Safeguards to ensure resident health information is kept private
9.	**Ensure economic opportunity is available to residents of the community as this is a major determinant of health** *Estimated cost: unclear costs*	• New jobs with the project must be primarily available to local residents
10.	**Develop method for communicating site compliance with hazard controls, effectiveness, and planned changes to control procedures to all interested parties** *Estimated cost: unclear costs*	• Address transparency concerns
11.	**Develop mechanism for handling complaints / inquires / rumors from the community, workforce, etc.** *Estimated cost: unclear costs*	• Address transparency concerns • Serve as an ombudsman's role to resolve problems as needed

Post-Construction Recommendations

Initiatives for Post-Construction Phase

Recommendation		Details
1.	**Health Impact Assessment (HIA) [post-construction]** *Estimated cost: $10k – $200k, possibly more depending on scope*	• Focus on environmental justice and equitability • Continue to monitor and assess residents' health and identify possible unanticipated effects of construction (environmental health registry)
2.	**Ensure economic opportunity is available to residents of the community as this is a major determinant of health** *Estimated cost: unclear costs*	• New jobs arising from new business must be primarily available to local residents
3.	**Continued access to physical and mental health services** *Estimated cost: $500k*	• Continuation of health clinic in Toomey Abbott building, based on resident needs