



Aggregated Notes

Overall Votes	
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1. Description of deconstruction	15
2. Asbestos abatement and containment	12
3. Presence of lead	9
4. Septic leach-fields	1
5. Structural evaluation	27 #2
6. Remittance by property owner of deconstruction permit	12
7. Certification of termination of electrical + gas service to property	0
8. Certification of "no infestation"	1
9. Certification of termination of water + sewer service and plugging of sewer line	0
10. COI for air-monitoring contractor	0
11. Insurance requirements for general liability, worker's comp, etc.	5
12. Permit from municipal DPU for temporary use of fire hydrant	0
13. Materials inventory evaluation	29 #1
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23. Workforce Development (added by Group 1)	1
24. Tax Incentive for Deconstruction (added by Group 1)	1

#1. Description of deconstruction for legal and outreach purposes

Issues	Recommendations	Unresolved
<ul style="list-style-type: none"> ● Too many definitions <ul style="list-style-type: none"> ○ Does a guiding authority have a definition? EPA, etc. ● Too specific with no info ● “Description” is different for legal vs outreach purposes <ul style="list-style-type: none"> ○ Legal description may be statewide ○ Outreach description could be local ● Using different phrases/ more than one term <ul style="list-style-type: none"> ○ Dismantling vs deconstruction ○ Many demolition companies are offering “dismantling” services that seem to be the same as deconstruction ○ Historic vs modern terms ○ Is the phrase that important or do we need to stay focused on the end result of the process? ● Definition is fluid even across pieces in academia ● City of buffalo defines deconstruction/demolition in law <ul style="list-style-type: none"> ○ Steps vs actual definition ● Difference between deconstruction and demolition <ul style="list-style-type: none"> ○ Salvage vs demolition/deconstruction ○ Is deconstruction the same as demolition but using different methods ○ If you ignore “demolition” you ignore the fact that buildings are being taken down ● You can't change what you don't measure. You must define what you are measuring. Scope needs to be defined with specific, clear language: deconstruction for who? Residential, commercial, industrial. Single family units, multi units 	<ul style="list-style-type: none"> ● Level of expertise/clarity different groups may have for which definition they receive <ul style="list-style-type: none"> ○ Definition technically the same but using different words/phrasing for different audiences ● Needs to be a standard so people can communicate and understand <ul style="list-style-type: none"> ○ Standard language ● Need legal definition and flexible definition ● List of materials <ul style="list-style-type: none"> ○ Guideline for handling materials ○ Level of detail for specific materials probably best at the local level ● Including definitions of demolition, salvage, etc alongside deconstruction to demonstrate differences <ul style="list-style-type: none"> ○ Methods, outcomes ● Start small and specific as a pilot. Communicate intent to scale with field testing. ● Get input from a larger scope of people - include waste processing facilities, haulers, contractors, landfill: the people who will ultimately be responsible for handling/next use/processing 	<ul style="list-style-type: none"> ● Are there any states that already have statewide deconstruction policy? <ul style="list-style-type: none"> ○ California?

#2. Asbestos abatement and containment

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> • Related issue is lead. 	<ul style="list-style-type: none"> • Require full abatement before demolition(as opposed to “demo with asbestos in place”) 	<ul style="list-style-type: none"> •
		<ul style="list-style-type: none"> • Older buildings have lead paint, are they treated in the same way? • For deconstruction as they are for demolition?
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Requiring lead abatement for <u>demolished</u> buildings as well (leveling the playing field b/w demolition and deconstruction). Ratchet system (years 1-3 • Incentives for lead abatement training? Free in NYS, but • Prioritizing areas environmental justice (i.e. years 1-3 these areas are incentivized, then 	
<ul style="list-style-type: none"> • Asbestos removal/abatement 	<ul style="list-style-type: none"> • Consider timing of lead abatement for deconstruction and demolition to ensure structural safety in process 	<ul style="list-style-type: none"> • Do we want extra requirements/training for abatement?
		<ul style="list-style-type: none"> • Cities under 1.5 million in population. • i.e. What is NYC doing? Are there lessons to be learned?

#5. Structural evaluation

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Certified personnel may have been demolition contractor ● No real license or certification for construction ● Labor - how and who gets certified ● Use building Code Inspector, not enough inspectors or training, already overworked ● Is this about the safety of the actual structure or of the materials being taken out ● Difference in evaluating building for safety of demolition vs deconstruction <ul style="list-style-type: none"> ○ Amount of time people are spending onsite, etc ○ "Emergency demolition" <ul style="list-style-type: none"> ■ Unsafe to enter <ul style="list-style-type: none"> ● Asbestos- testing and remediation ● Fire, etc. ● Untrue designation due to political reasons ■ Is demolition actually "safer" - to surrounding community ● Structural evaluation of wood, etc. ? ● Contingency plans- who has liability? <ul style="list-style-type: none"> ○ Who owns the building <ul style="list-style-type: none"> ■ Governments vs land banks ○ Who is actually taking the building down <ul style="list-style-type: none"> ■ Demolition companies already have insurance, etc ■ Volunteer situations (Cornell project) ● Surface vs subsurface <ul style="list-style-type: none"> ○ Responsibilities ○ Easements... ○ Transferring of ownership- ex SUNY Construction Fund ● Tight requirements to eliminate gray 	<ul style="list-style-type: none"> ● Recommend specialist with license ● Regulation that drives Inspector to deconstruction ● Code generation ● Require Engineering/Architecture letter stating safe to deconstruct ● State mandated training and certification - State supported and enforced ● Resource management and getting it out to local government ● Criteria to transition from deconstruction to demolition required with what is deemed necessary to transition ● Time length based on contractor experience and ability to move material ● Require staged inspection to verify building can still be deconstructed ● Regulation to minimize time between buying and deconstruction to prevent owners from neglecting property to result in demolition ● Affirmative maintenance = building code ● Actionable authority and fines to code enforcement ● Look at and draw from existing demolition laws ● Delays for demolition that are longer delays than for deconstruction ● State will certify third-party evaluators or dedicated city employees. (Don't put the 	<ul style="list-style-type: none"> ● Managing expectations of profits/outcomes ● Does training / toolkit currently exist ?

<p>areas/loopholes</p> <ul style="list-style-type: none"> • Integrity 	<p>onus on code review officials, esp. for smaller municipalities)</p> <ul style="list-style-type: none"> • Deconstruction code added to (ala code for existing rehab + new construction) Department of State (NYS) can create a floor & local municipalities can adopt more stringent laws “in consultation with DEC and DOH” (‘Home rule’) • Third party staff person to first inspect the space (i.e. local municipal rep) paired with education for this role to ensure safety 	
<ul style="list-style-type: none"> • Ensure a safe environment for building removals while preventing loopholes via “unsafe” designation and subsequent exemptions 	<ul style="list-style-type: none"> • Define “imminent danger” • Code rules for deconstruction - follow asbestos abatement procedures , • Combine with DOL notification process and incentivize fee for deconstruction • Streamlining review; make sure the process isn’t duplicative or more costly 	
<ul style="list-style-type: none"> • Demolition by neglect as a way to circumvent deconstruction laws 	<ul style="list-style-type: none"> • Program to help provide funding for stabilization; 	

#6. Remittance by property owner of deconstruction permit

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Identifying criteria that would trigger the permit process- what are the thresholds/criteria?, municipality needs to define what to put in the permit ● Demarcating between residential, commercial, industrial- different skill set- different liability issue ● Make it easy on Property owner (onus) ● Scale: commercial/industrial is more important to not go straight to landfill but residential may have more value ● Post for public comment- 30-60 day increments (too long?) ● Value in state defining who's regulated (municipalities aren't in charge of implementing building permits) ● How to create connective tissue between state and local level ● Can make code stricter not looser ● State establishes uniform code, local establishes the nitty gritty ● No national standard ● Defining timelines/guidelines at state level? because crazy making bureaucratic process- want to incentivize/make the process easier 	<ul style="list-style-type: none"> ● State-level frameworks/templates for ● Lower fee for deconstruction per ● Blanket legislation that trickles down ● Thinking broadly ● Wide criteria definitions as open as possible ● Increasing demolition permit fee <ul style="list-style-type: none"> 1) that money goes towards deconstruction grants - specific language <p style="text-align: center; margin: 10px 0;">OR</p> <ul style="list-style-type: none"> 2) Minimum of x amount (state sets the floor, local can increase as needed) 	<ul style="list-style-type: none"> ● Is signage an issue that needs to be addressed @ the state level?? ● A- Portland example - mandatory signage to provide additional contact info for questions; and also inform the neighborhood of deconstruction (instead of demolition). 3 signs required at a minimum. Encourages contractor accountability.

#13. Materials inventory evaluation

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Not enough training of where all material can be used ● Properly storage facility ● Storage space <ul style="list-style-type: none"> ○ Where are we storing current new materials that may be replaced with deconstructed materials ● Business opportunity ● Hand sorting requirements. ● Not enough incentives to sort materials (see #17) ● No program exists to track available material ● How people place value on items <ul style="list-style-type: none"> ○ Might have more value in one locality vs another ● How far do you go to find a use for items ● Surplus materials market <ul style="list-style-type: none"> ○ Quality ● Initial and Secondary evaluation to determine inventory and appraisal ● Weather restrictions ● Speed of deconstruction more of issue than cost ● Spray foam prevents recycling (material used for construction may prevent using material) ● Open, market-based approach to cultivating and certifying qualified personnel, vs. legislative approach?; Practicality of trades-based certification (e.g., a state-level certification board might be clunky) ● Do these jobs already exist or will these jobs and skills need to be created? <ul style="list-style-type: none"> ○ Green mission- appraisers in Virginia ○ Paperwork, taxes, fraud, behind the scenes work ○ Value of house vs value of materials after deconstruction ○ Other hidden skill set(s) and 	<ul style="list-style-type: none"> ● Generate programs to track and appraise material <ul style="list-style-type: none"> ○ Create a NYS council or IBC council to create structural performance/material s testing standards for existing/historic building materials ● Storage facility ● New tools for deconstruction ● Processes for construction and deconstruction ● Develop a benchmark financial model for how to finance new construction projects using a target percentage of salvaged materials (assume 65% usability/ 35% non-usable) ● Incorporate targets for material percentage ● System that contains and tracks materials used in construction, retrofits, and renovations to track everything going in and out of business ● Data permitting through state cleveland open to public: # demolished, # deconstructed, Materials ● State-level incentives for local certification ● “Block-chain” model of creating a new circular economy, new way of valuing externalities ● To start, work with municipal/public entities that will publicly share evaluation information/skills so that municipalities may learn from each other. 	<ul style="list-style-type: none"> ● Legislation addressing recycling streams, by material (ex: drywall, or carpet, or concrete); there is LEED, which is a point system for waste diversion ● Waste Management Plan-state mandated? or local-level; at the outset the purpose should be to report/ generate data, then it could be prescriptive

workforce

- **Social media, online marketplace/ creating these marketplaces, connecting materials to people**
- Current building codes and construction standards do not address or recognize existing/historic building materials
 - Grading structural materials
 - Wood is different today than it was 100 years ago
 - Convincing inspector that material is ok
 - Local authority is deciding
- Predictability of sourcing and supplying building materials (e.g., I need X feet of floor boards, or 500 steel angles, etc.); cost of labor to make salvaged materials reusable and marketable
- Labor & Certification
- Other stakeholders: home inspectors; other codes (fire, etc.)
- Control flow of material (municipal vs private)
- Grading structural materials
 - Wood is different today than it was 100 years ago
 - Convincing inspector that material is ok
 - Local authority is deciding
- Conflict of interest in the process
- Scale of deconstruction projects
 - Permitting, bids, actual deconstruction, holding of materials- inventory evaluation, reuse/resale
- Commodity/trends in goods/materials
 - Rustic barn wood is popular now, but what happens when it goes out of style
- Cornell circular construction lab
 - System to walk into building and inventory materials
 - Produce estimate for

<p>what would come out of structure and value</p> <ul style="list-style-type: none"> • Evaluation of materials vs actual end result <ul style="list-style-type: none"> ◦ Portland deconstruction guide ◦ Somewhere in CA has an excellent guide 		
<ul style="list-style-type: none"> • Protect resellers from liability 	<ul style="list-style-type: none"> • “Hold harmless” insurance for hazardous materials to protect resellers • Insurance assistance; “Insured intermediary workforce” <ul style="list-style-type: none"> ◦ pick and pull model to cover the workers on removal side 	
<ul style="list-style-type: none"> • Worker availability and skill training • Valuation - assessing demand and monetary value versus actual material availability - how do contractors / certified personnel assess • Creating a transportation and holding plan - network 	<ul style="list-style-type: none"> • Create workforce; incentives for encouraging job training • Grants for training people • Grants to purchase warehousing - startup grants 	
	<ul style="list-style-type: none"> • Lock material inventory evaluation into permitting process 	
<ul style="list-style-type: none"> • Current insurance structure creates disincentive for deconstruction 	<ul style="list-style-type: none"> • Add a carve out for deconstruction firms, either to exempt them or greatly reduce 	<ul style="list-style-type: none"> • Scaffold Law
<ul style="list-style-type: none"> • Reuse of salvaged materials 	<ul style="list-style-type: none"> • Exception to New York State materials codes or material appraisal • Identify historically valuable materials 	

#14. Anticipated building stock affected by deconstruction

Issues	Recommendations	Unresolved
<ul style="list-style-type: none"> ● What to do with building that can not be deconstructed but have to be demolished ● When should buildings be required to be taken down (cost to maintain outweigh cost of structure) ● Storage and transportation of material may affect what is available in areas ● Program to reuse materials does not exist ● Tracking material does not exist ● Prioritizing or valuing material will keep the cycle of not investing in blighted low income areas ● Material left behind after demolition or deconstruction ● Historic preservation issue; how to incentivize adaptive reuse before we even consider deconstruction ● Existing laws are for single-family homes, how to develop and implement legislation for larger-scale and/or commercial buildings ● Will current building materials retailers be threatened by the introduction of reused building materials? <ul style="list-style-type: none"> ○ Is this going to affect the number of jobs in current building materials sales? ○ Thoughts: there will always be a market for new materials ● Paintcare: Manufacturers are required to pay more into recycling of materials - essentially paying for transportation of the materials to be recycled <ul style="list-style-type: none"> ○ Will the success of this program influence other 	<ul style="list-style-type: none"> ● Incentivize deconstruction ● More state and local policy incentives to adaptively reuse existing buildings ● Make deconstruction cheaper than demolition ● Programs other than reuse in construction to salvage material stock ● Area targeting to generate resale of material ● Incentivize the sale of the material to ensure it moves faster; rebate for buyers not sellers, i.e. property tax reduction for percentage of reused material in new construction/retrofit/renovation ● Higher taxes on virgin material to encourage deconstruction ● Demountability plan or deconstruction or disassembly plan/design becomes a requirement for new construction (“un-building” drawing sheets to be stamped and sealed) ● Model ordinance developed by the state that can be adopted at the local level ● Extended producer responsibility... NYC is doing this with paint recycling (it is a state law) 	<ul style="list-style-type: none"> ● May cause higher rent/sales rate of properties

<p>programs, like deconstruction?</p> <ul style="list-style-type: none">○ Could a new fee be added to purchase of new building materials?○ Would a new fee applied to only new building materials influence decision-making for those who are choosing reused vs. new materials?○ If not, is that okay as long as the funds collected in the fees are used to support deconstruction/reuse efforts through grants/education programs, etc.?		
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#15. If re-build is to occur on parcel, applying for a permit from municipal Code Enforcement Bureau

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> • ***Related to 17 		
<ul style="list-style-type: none"> • Nimbyism - loss of available housing stock, encourage affordable housing preservation, neighborhood character 	<ul style="list-style-type: none"> • Incentivize permit expedition if DUA is being replaced; perhaps incentivize dua increase, other concessions? 	
<ul style="list-style-type: none"> • Encouraging deconstruction vs. demolition 	<ul style="list-style-type: none"> • Form-based code still intact to preserve neighborhood character 	<ul style="list-style-type: none"> • How to protect people from costs (For example, a dilapidated garage on a low-income property) • →When the system works, it makes it more cost effective to deconstruct

#16. Recoverability matrices: time and availability (in existing form) from building, resource/time-intensity of recovery

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● How do we convert the things we can't use to things we can use? ● Affordable housing materials being overlooked ● Jumps in technology ● What does recoverability matrices mean? ● Storage? ● Scalable? 	<ul style="list-style-type: none"> ● Hierarchy of recovery, developing priority materials ● Top priority: ● state-subsidized storage 	

#17. Recoverability and redevelopment incentives

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Some materials can't be recovered ● Recoverability 		
<ul style="list-style-type: none"> ● Redevelopment 		
<ul style="list-style-type: none"> ● Cost incentivized vs. demolition 	<ul style="list-style-type: none"> ● Tax breaks ● Tax rebate ● Portion of the sale of the material ● Grant funding 	
<ul style="list-style-type: none"> ● Workforce development 		
<ul style="list-style-type: none"> ● Deconstruction land-use 	<ul style="list-style-type: none"> ● Incentivizing parcels to be used once deconstructed ● Incentives for material reuse ● Point system of incentives (1-point for deconstruction, 1-point for reuse within neighborhood boundaries) ● Hierarchy of building uses (state legislation vs. local) 	

#18. Municipal ownership, non-profit ownership, land trusts potential models

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> • This is connected in our minds with #14 • Phasing: Need to prevent market flooding with deconstruction demand, scale up • Municipalities and government entities are not known for being trailblazers, so there may be some challenges 	<ul style="list-style-type: none"> • Phase 1: Incentivize municipalities to stabilize buildings (connects to 5) <ul style="list-style-type: none"> ◦ 2-3 years ◦ State leadership • Phase 2: Next phases: Adoption grants for non-governmental organizations • Phase 3: ? 	
<ul style="list-style-type: none"> • Warehouse space is required both where material is being salvaged as well as where it is in demand 	<ul style="list-style-type: none"> • Municipalities offer unused warehouses • Empire state development - small grants for warehouse acquisition 	
<ul style="list-style-type: none"> • Meeting the needs of the market 	<ul style="list-style-type: none"> • Two tiers of warehouses: non-profit versus for-profit, "robinhood models". Ensure equity; boutique showrooms can subsidize affordable materials for the community 	

#19. Where does responsibility for deconstruction end?

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Cost of demolition to deconstruction spec ● Owner responsible ● Tax credit/incentive programs for owner ● Incentivize resale of material ● Demolition occur in low income areas ● Municipalities buildings ● Material responsibility after dropped off for storage ● Legal responsibility to deconstruct, i.e. owner/municipality, Site left over ● Will current building materials retailers be threatened by the introduction of reused building materials? <ul style="list-style-type: none"> ○ Is this going to affect the number of jobs in current building materials sales? ○ Thoughts: there will always be a market for new materials ● Paintcare: Manufacturers are required to pay more into recycling of materials - essentially paying for transportation of the materials to be recycled <ul style="list-style-type: none"> ○ Will the success of this program influence other programs, like deconstruction? ○ Could a new fee be added to purchase of new building materials? ○ Would a new fee applied to only new building materials influence decision-making for those who are choosing reused vs. new materials? ○ If not, is that okay as long as the funds collected in 	<ul style="list-style-type: none"> ● Incentivize low-income blighted to help assist ● Incentivize upfront not back end tax credit for those areas ● All are responsible for deconstruction ● Material responsibility shifts from to deconstructor to storage facility ● Site responsibility owner/municipality ● Various entities taking on liability for materials ● End of project standards should be the same for demolition and deconstruction ● State legislation recommendation: Municipalities that have a standard for end of demolition project should maintain the same standard for deconstruction 	<ul style="list-style-type: none"> ● How much of the processes of demolition is legislated? Are we over-legislating deconstruction in comparison? ● In many ways, our discussions have led to the suggestions that demolition and deconstruction regulations should be similar

the fees are used to support deconstruction/reuse efforts through grants/education programs, etc.?

- Responsibility ends with responsible distribution of materials
- Ends once it leaves the property
- Depth of 24 inches?
 - Materials below this depth should not be just left
 - Keeping a record/drawing of that material and structure for future construction/surrounding construction/utilities
- What is the end of deconstruction?
- Amount of material landfills are accepting
 - Contaminated soil
 - What is 'end of life' and waste
 - Landfills are already maxed out with accepted amounts of construction and demolition debris
- What system will be put in place to determine if deconstructing a building is "worth it"
 - Quantifying by year the building was built
 - Estimates say 70% of the average building could be recycled or reused
- Are landfills measuring by weight or volume?
 - Foundations (concrete) weigh a lot etc.
- Why 24 inches???
- Deconstructing building and leaving foundation
 - Don't overregulate deconstruction
 - Burden on deconstructors (ex. Needing special

machinery just to dig out and cap a sewer pipe would be a huge burden)

- Quantity of projects vs trying to get as much out of one project as possible

#20. Reporting Requirements

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Salvage metrics 	<ul style="list-style-type: none"> ● Online reporting platform 	<ul style="list-style-type: none"> ● In what ways should this be quantified? ● How to deal with additionally identified hazmats → time and cost implications
<ul style="list-style-type: none"> ● Reporting - is it actually being salvaged 	<ul style="list-style-type: none"> ● Web-based form rather than paper for demo contractors reporting → resource catalog 	
<ul style="list-style-type: none"> ● Market needs to understand where the material actually went 	<ul style="list-style-type: none"> ● Online marketplace <ul style="list-style-type: none"> ○ Not just supply ○ Ability to report material demand “wishlist” or “wanted” 	<ul style="list-style-type: none"> ● Software or staff required to expedite intake and cataloging of materials
<ul style="list-style-type: none"> ● Point of sale; standard costs, interoperability 		
<ul style="list-style-type: none"> ● Education of the market 	<ul style="list-style-type: none"> ● Public awareness campaigns - Materials to be reused ● Contractor processes: required disclosures of salvaged materials 	

#21. Salvage Targets

Issues	Recommendations	Unresolved Questions, Comments, etc.
<ul style="list-style-type: none"> ● Realistic targets ● Facilities - materials have to go somewhere (all facilities, not just “warehouses”) ● Certification ● Hard to define % due to types of material ● Material reuse/recycling ability and center location ● Recycling center locations ● Due to alternate routes for reuse/recycling alters number ● Volume quantities vs tonnage quantities 	<ul style="list-style-type: none"> ● A market-based approach supplemented by incentivization ● Incentivizing percentages to ensure more reused ● State legislative to tier incentives ● Incentives have to match federal ● Start small with pilot projects. ● Treat targets with regionalities in mind: available processing facilities, workforce, etc. ● Make like LEED and Passive house programs ● Setting targets is ideal- parties responsible for deconstruction are probably not the constructors of the project (and had no say in the materials that were installed in the project). Salvage targets must be coupled with responsible construction (new) material choices/material for the future. ● Task force/advisory board <ul style="list-style-type: none"> ○ Salvage targets ○ Workforce targets ● Incentivizing Increase 	

Large Group Discussion

#13. Materials inventory evaluation

- Legislation addressing recycling streams, by material (ex: drywall, or carpet, or concrete); there is LEED, which is a point system for waste diversion
- Waste Management Plan- state mandated? or local-level; at the outset the purpose should be to report/ generate data, then it could be prescriptive - **LEED requires a waste mgmt plan when doing demolition**
- Scaffold Law - **1880's before worker's comp; has not been repealed and still places liability on the employer; sentiment that it should be eliminated; very expensive coverage - how many more units of affordable housing could be constructed if we didn't have to pay for this coverage? This is a barrier currently but could function as an incentive; Diane C mentioned that advocacy around the safety of the industry would be helpful**

EXPERT DISCUSSION:

Dave B.: In Vancouver, B.C., drywall is regulated - health hazard to throw in landfill, needs to be removed prior to demolition and hauled to transfer station only for drywall. Paper is separated from gypsum and new drywall is made.

Dr. Kelles: Concerned with health hazards relating to burning of drywall; create infrastructure, offer incentives and only then implement "stick"; physical space needed for receiving streams of deconstructed materials (schools offered as a warehouse option); incentive example: lower fees for hauling to reuse center vs landfill

Gretchen.: The vast majority of material is a single stream; on-site source separation has been proven to be helpful - would be key element at local level

Jennifer M: What data systems do we need to understand building stock composition? What regulations are needed? Material depots, material passports, urban mining - transformative at local and state level

Dr. Kelles: Buy in is important when it comes to government; example given is of PDX, advisory board used to establish ordinance; Noted that people don't like change but if they have the ability to choose or instigate the change, buy in inherently exists

Dave B: On PDX, 1995 first deconstruction company was trained and thought of as community asset; place for affordable building materials and things you didn't want to throw away; "part of culture" - PDX deconstruction advisory group existed but the citizens (once educated) chose deconstruction themselves; noted that experts themselves had questions/concerns today about how deconstruction will work

Comment from Tolga from Greater Mohawk Valley Landbank: Noticed that Stewart's often demolishes buildings when they want to build something new; they offered a bid for demolition and underbid 5 contractors in order to offer deconstruction vs. straight demolition

JJ: NYS has 561 construction and demolition debris processing facilities - are we creating more? What's the goal here? *Another note about how the full life cycle should be considered, cradle to grave

Dr. Kelles: We don't have a comprehensive list of resources with contact information/region/etc. That would be step 1. Also need a state created searchable database to build an online marketplace. What are the barriers of these 561 facilities? What do they need help with?

Diane C: In Tompkins County, there's not enough capacity at these facilities - we need larger scale facilities for the public, the trades; Buffalo Reuse has a

model that is worth looking at

Dr. Kelles: Oftentimes, valuable pieces get pulled for scrap metal and the rest thrown away - how can we deter this?

Kriti: Are there ways to mandate that material be created in a way that it can be reused? Buyback programs? Subsidies for companies willing to do this?

Jackson: Modular, panelized buildings could be utilized in this way

Dr. Kelles: careful about laws that step into personal choice; we can incentivize and offer more affordable ways or more expensive ways to do anything

Dave B: Government and govt projects have standards set higher; using them as pilot projects

#5. Structural evaluation

- Managing expectations of profits/outcomes
- Does training / toolkit currently exist ?

EXPERT DISCUSSION:

Jackson: Wide array of people's abilities - some companies will be more well-versed; making sure companies involved provide a pathway for training

Jennifer: Govt offering incentives for reused materials

Diane: More infrastructure, more space, better trucks, more workforce, more capacity in general - without regulation some of this is already happening but pilots focusing on how investment could elevate capacity would be helpful; layering on environmental effects as well; huge need for non-structural components as well

Dave: Reclaimed wood was stress tested (Madison, WI) and wood was stronger than new wood; encouraged Washington State to change building code to incorporate reclaimed wood as being acceptable in certain situations (not trusses, etc.)

Tolga: We need public education effort ranging from reclaimed wood + deconstruction to folks in the trades who have quality skills (esp. passing on these skills to a younger generation as trades folks are aging out)

Jennifer: San Antonio has been focused on growing a heritage trades, affordability of materials, accessibility

Q from audience: What are efforts towards re-using public housing?

Diane: I did a walk through and projected a potential harvest and the materials were scrapped anyways; there is value in every building

Jennifer: Ordinance exists that considers whether housing will be lost; considering use afterwards is important

Dr. Kelles: Not every building can be deconstructed - some Decon can be dangerous; disinvestment in public housing leads it to have little to no value, often be beyond deconstruction; we want to protect our investment collectively and this also involves educating electeds

Tolga: Systemic problems revolving around vacancies and flight of habitants; perhaps buyers should be required to address issues of housing like lead; short term fixes create more problems down the line, maybe in different areas like health of residents

#14. Anticipated building stock affected by deconstruction

- May cause higher rent/sales rate of properties

EXPERT DISCUSSION:

Diane: You can only line item the components you take out, which will not match the value of the house itself; unintended consequences in PDX around a pending ordinance where folks rushed to tear down many buildings before the ordinance was passed

Dr. Kelles: If there was an ordinance where houses had to be constructed with a certain amount of Decon material, could cause issues; much more disruptions with demolitions; decrease in air pollution and ground pollution in Decon vs demolition

Tolga: How to incentivize Decon and companies that use deconstruction materials in new construction builds

Dr. Kelles: Depends on how much incentive is offered for deconstructed material vs how high virgin material is taxed - a pilot could be helpful to see how this would play out in a municipality

Tolga's Group: Incentivizing deconstruction and taking care to make sure blighted neighborhoods don't remain so

Jackson: Contractors seeing a tax increase would be problematic unless market could provide a sizable amount of alternative options

Gretchen: Sign up for CROWD conversations! At a local level, a certain level of reused materials being required for new construction would help support Decon efforts

Tolga: Building trades tend to be conservative and forcing something to happen is not received well - incentivize to get early adopters

Gretchen: Baltimore is requiring 1% of Decon material

Lisa P: Reminds me of French using idea for incentivizing using recycled materials - tipping fees?

Gretchen: Higher!

Diane: Higher! No state law requiring this

Dr. Kelles: Create incentives; perhaps raise state tipping fees and let municipalities decide; citizens need to be collectively demonstrating in order to make change

Question from audience: can the panel comment on why there is a stronger focus on residential? What would be good areas to focus on in commercial?

Eric: Residential is generally easier to focus

Carlo: In Troy, example was given of the parking garage - that was salvaged to a degree; asbestos and abatement poses an issue and much material is rendered unsalvageable

Dave: residential building renders residential materials for residential customers; the struggle for the industry nationwide is that commercial builders aren't looking for deconstructed materials

Jackson: To the point about car dealerships reinventing their facade, this material is less likely to be reused because it was designed for a particular aesthetic - its not easily used somewhere else in an effective manner

Kevin, ReUse Action Buffalo: His efforts at ReUse Action are incentivized by the marketplace but not the govt - good material moves; incentives are helpful but let's think broadly about them

Jennifer: NYS should be a leader in these efforts - we can do this!

Q from audience: Do we have data on what is coming from residential vs what is coming from commercial?

Dr. Kelles: No, we don't have this data; it will be important that this data is broken down (tile, Sheetrock) and standardized

Gretchen: There is data, not much of it and it's not usable in terms of helping us measure success now or in the future. What Dr. Kelles is saying is important - having standardized info and more granular data. Building waste is the largest source of waste. We need to start there - in gathering the data.

Eric: We need to have the infrastructure to create the policy and create incentives - we can't continue this great conversation without community engagement and education; public pressure will be key; Zombie Enforcement can be a revenue stream; use the leverage - make bank deconstruct vs demolish

Nicole: What role would Decon ordinance play in preventing demolition by neglect?

Sam, City of Albany Code: The best way to prevent demolition by neglect is to fund code enforcement - the litigation process is lengthy; demolitions that happen in the City of Albany are largely emergency demolitions

Tolga: The Zombie Property law could be helpful but the addresses are shielded at the state level - can't single out the bad actors as a result; article 19a now called 19c - foreclosure on abandoned properties; how can local govt more quickly sell or auction homes instead of sitting on them until they need to be demolished

Eric: Truly need strong code enforcement; timetables could be edited in favor of preserving these assets