Sustainable Vitality
Using New Technologies to do important things better

2019 NIFA Housing Innovation Conference
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Nebraska Investment Finance Authority
TWO WHEELS OF ANALYSIS
(OUTCOMES - VITALITY)

• Many development/finance practices are 100+ years old
• How can we plan, design, develop with vitality & utility?
• How could we reduce risk and complexity?
• How can we change boundaries, practices and policies?
• How could we dis-incentivize waste and friction?
• All to achieve less complexity = lower cost and higher profit
SUSTAINABLE, VITAL COMMUNITIES: HOW TO MEASURE

• Sustainability: measurement of value and utility
• Financial and non-financial metrics
• Measured across five domains, across time
  • Public-Policy,
  • Technology,
  • Economics,
  • Socio-Cultural Norms, and
  • Ecologics
THE CHALLENGE:

- **Sustainable Vitality:** When defined and measured—
  - Compared to what,
  - In what timeframe, and
  - In what units.
- **We need to develop a baseline index**
- **It needs to start on an “Occupant” or “Human” scale**
Define the goal - collect and examine data

- Define desired outcomes in context of “HUMAN Experience”
- Measure across time ranges & metrics with revisions

Examples of prior undertakings:

- Drake Court Neighborhoods,
- North Omaha,
- Lincoln So-do,
- Housing Studies
LOGISTICAL FRAMEWORK NEEDED - INGREDIENTS

- **The Logistics (WW-II lessons); Necessary Ingredients:**
- **Leadership:** Must be dedicated, focused and concentrated
- **Infrastructure:** System for monitoring, reporting, comparison, communication, and corrective action
- **Knowledgeable team:** Planners, Production staff, funding sources, subsidy monitors, inspectors, occupants, facilitators
• Desired Outcomes:

In a cost efficient Manner, over five years

restore 5,000 substandard homes to achieve:

• Affordability,
• Tenure,
• Blight removal
• Improved neighborhood appearance, and
• Improved homeownership ratios

•
IN GENERAL – HOW IS THIS DONE?

• By Examining and Changing “Permission-less” variables:
  • Boundaries (who does what)
  • Practices (How many, when and where)
  • Policies (Reducing Risk and Complexity-- Increases Reward)
  • Procedures (When and Where and Why)
  • Applying New Technologies (Digital, Handheld, Social)
  • Examining Domain Benefits/impacts
EXAMINE THE “DOMAINS” FROM THE OCCUPANT PERSPECTIVE

<table>
<thead>
<tr>
<th>Block by Block</th>
<th>Ecology</th>
<th>Economy</th>
<th>Public Policy</th>
<th>Culture</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Near Term</strong></td>
<td>Low Mobilization Impact</td>
<td>Match Funded w/ Restrictive Covenants</td>
<td>Use for rental and for owners</td>
<td>Speed for min. disruption</td>
<td>Faster Remediation</td>
</tr>
<tr>
<td><strong>Middle Term</strong></td>
<td>Residential Energy Improvement</td>
<td>Reduced complexity less cost</td>
<td>Attractive to Newcomers</td>
<td>Mixed Population</td>
<td>One File-One project –digital and handheld</td>
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<tr>
<td><strong>Long Term</strong></td>
<td>Recycle for land fill preservation</td>
<td>Low to zero Interest cost to owner</td>
<td>No Gentrification</td>
<td>Architectural Blend</td>
<td>Easier to finance</td>
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EXAMINE THE “DOMAINS” FROM BUILDER-DEVELOPER PERSPECTIVE

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Near Term</strong></td>
<td>Low Mobilization Impact</td>
<td>Bulk purchasing opportunity</td>
<td>Planning and inspection efficiencies</td>
<td>Recruit and mentor new subs</td>
<td>Faster Remediation</td>
</tr>
<tr>
<td><strong>Middle Term</strong></td>
<td>Less Subcontractor travel</td>
<td>One subcontractor 12 houses</td>
<td>Easier traffic and security arrangements</td>
<td>Nice work mix Outdoor and indoor</td>
<td>One File-One project –digital and handheld</td>
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<tr>
<td><strong>Long Term</strong></td>
<td>Lower dump fees and travel</td>
<td>Financed and closed by others</td>
<td>Critical mass to repeat on another block</td>
<td>Measurable Observable Impact</td>
<td>Easier to finance</td>
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EXAMINE THE “DOMAINS” COMMUNITY LEADERSHIP PERSPECTIVE

<table>
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</tr>
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<tbody>
<tr>
<td><strong>Near Term</strong></td>
<td>Low Mobilization Impact</td>
<td>One Contractor</td>
<td>Planning and inspection efficiencies</td>
<td>Recruit new residents and workers</td>
<td>Management Systems by others</td>
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<tr>
<td></td>
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<td>One meeting</td>
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<tr>
<td><strong>Middle Term</strong></td>
<td>Less city staff hours spent</td>
<td>Opportunity for park and</td>
<td>Visible to other blocks and voters</td>
<td>Hi Profile community revitalization</td>
<td>One File-One project – digital and handheld</td>
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<td></td>
<td>traveling</td>
<td>street work</td>
<td></td>
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<tr>
<td><strong>Long Term</strong></td>
<td>Reuse of existing infrastructure</td>
<td>Benefits of Phoenix effect</td>
<td>Reduce Crime - increase ownership</td>
<td>Better future for schools and businesses</td>
<td>Easier to administer</td>
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<td>Better ROI</td>
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• **Block By Block Example: Who does what and when?**
  • Block by block analysis/ bidding/contracting (by macro agents)
  • Block by Block Rehab lending (e.g. Good PACE)
    • (by technicians with Hand held systems)
  • Have everyone use the same digital file!
  • One to One Construction Coordination (facilitator to contractor)
  • Loan and Finance Administration by digital provider/intermediary
CHANGING PRACTICES

- One Contractor – 12 houses at the same time
- One mobilization, one dumpster – coordinated recycle
- Security and Traffic responsibility shared with City
- Inspection/acceptance and payment independent of finance and contracting
- Digital Subcontractor recruiting/bidding and Plan Rooms
- Only do the bad houses with the most impact
CHANGING PUBLIC POLICY

• **Examine Community Policies and Procedures:**
  - Revise to increase Production, Affordability and Tenure
  - Treat Owner occupied and rental properties the same
  - Tenure commitment consistent with subsidy and improvement life
  - Offer free services (Wi-Fi, transportation and cable) as incentives for desired occupant cooperation
  - Consider Car free zones (Garages and parking not allowed)
STATUS AND TIMETABLE

- Technology investment being negotiated – Distributed ledgers
- Discussions underway in major neighborhoods and towns
- Could be complicated by, or a resource for, flood recovery
- Website in design
- Proposed launch - Spring 2020
WHAT WILL IT LOOK LIKE WHEN WE ARE FINISHED?

• **Use of New Technologies to do important things better**

• Examining Boundaries, Practices, Procedures and policies
  • For permission-less innovation opportunities

• Conducting Planning and Design review for
  • value and utility
  • across five domains
  • in financial and non-financial terms
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