HCAI Department of Health Care Access and Information
2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov

*** SPECIAL NOTICE ***

This meeting will be held in-person at the locations noted below, as well as by teleconference. Committee members and members of the public may fully participate from their own locations.

NOTICE OF PUBLIC MEETING

HOSPITAL BUILDING SAFETY BOARD
Technology and Research Committee

Date:
Tuesday, November 1, 2022
9:00 a.m. – 12:00 p.m.
Please note early start time.

Locations:
Department of Health Care Access and Information
2020 West El Camino Avenue, Suite 930
Sacramento, CA 95833

Department of Health Care Access and Information
355 South Grand Avenue, Suite 2000
Los Angeles, CA 90071

Teleconference Meeting Access:
HBSB Teams TAR Committee

For more detailed instructions on attending or joining the meeting, see pages 4 and 5.

Committee Members:
Bruce Rainey, Chair; Michael Foulkes, Vice-Chair; David Bliss; Benjamin Broder*; Deepak Dandekar; Gary Dunger*; John Griffiths; Bert Hurlbut; Eric Johnson*; Scott Mackey; Michael O'Connor

HCAI Staff:
Hussain Bhatia; Larry Enright; Joe LaBrie; Carl Scheuerman; Jamie Schnick; Nanci Timmins

*Consulting Member

1. **Call to Order and Welcome**

   Facilitator: Bruce Rainey, Committee Chair (or designee)

2. **Roll Call and Meeting Advisories/Expectations**
   Facilitator: Ken Yu, Executive Director (or designee)

3. **Review and approve the draft of the July 27,2022 meeting report/minutes**

   Facilitators: Bruce Rainey, Committee Chair (or designee)

   - Discussion and Public Input

4. **Presentation: The Inflation Reduction Act: What's in it for me?**

   Facilitators: Anne Andrew, Tax Partner, and Wendy Punches, Tax Managing Director, PriceWaterhouseCoopers (or designees)

   - The Inflation Reduction Act (IRA)
   - Major Themes: Decarbonizing Power Generation, Transportation, Promoting Construction and Improvements to energy efficient and low carbon emissions buildings, Providing longer range certainty for capital expenditure, Incentivizing tax exempt and low-income entities to participate in clean energy.
   - Ways Health Providers can access and utilize funding made available within the act.
   - Discussion and Public Input

Hospital Building Safety Board
Technology and Research Committee
ESG Tax Incentives in the Inflation Reduction Act

November 1, 2022

pwc

Agenda

- Introductions
- Overview of the Inflation Reduction Act
- Business Update
- Opportunities
- Discuss Next Steps

Inflation Reduction Act - overview

Overview

- Largest federal investment in clean energy in US history
- Reinstates and significantly expands current incentives providing an estimated $370 billion of new energy related tax credits over the next 10 years
- In addition to significant energy or ‘E’ provisions, the bill also aims to advance the economy further into the social ‘S’ and governmental ‘G’ space, by promoting growth in targeted areas
- Many credits continue until end of 2032 (with some transition dates)

Major themes:

- Decarbonizing power generation and transportation
- Promoting lower-carbon manufacturing
- Building energy efficiency
- Promoting US Jobs
- Creating options for financing

Inflation Reduction Act - key highlights

Tiered credit system

Many new and existing incentives now have a two-tiered system with a ‘base rate’ and a ‘bonus rate.’ The bonus rate would equal five times the base rate and would apply to projects that meet certain wage and apprenticeship requirements. Some of the credits also include additional rate enhancements based on the domestic content of the property as well as where the projects are located (i.e., low income communities, energy communities, etc.).

Decarbonizing power generation

Extends and expands the current system of tax credits through 2024 and then transitions those incentives into ‘technology-neutral’ credits beginning in 2025. Solar is now eligible for the PTC, and new credits support nuclear energy and other lower-carbon technologies, such as biogas and stand alone battery storage.

Carbon capture

Enhances the existing tax credits for carbon capture and storage or utilization. Taxpayers would be eligible to receive up to $60 - $180 per metric ton of carbon captured depending on the method by which the carbon is captured and the way it is sequestered.

Energy credits and incentives - key highlights

Decarbonizing transportation

Extends the income and excise tax credits for biodiesel, renewable diesel, and alternative fuels, and provides new credits for sustainable aviation fuel as well as clean hydrogen. Extends and expands the tax credits for Electric Vehicles, and promotes US jobs by including content and assembly requirements for some credits.

Building energy efficiency

Extends and expands the energy efficient commercial buildings deduction, the new energy efficient home credit, and provides enhanced benefits for individuals.

Lower-carbon manufacturing and green jobs

Revives the qualified advanced energy project credit, allowing the Secretary to allocate an additional $10 billion of tax credits to qualifying projects. Credit requirements are similar to the original credit, yet eligibility is expanded to include industrial facilities. The credit is expanded to include projects that reduce GHG emissions at existing industrial facilities by at least 20%. Creates a new advanced manufacturing production credit for each eligible component that is produced in the US and sold to an unrelated party. Eligible components include qualified solar and wind components, inverters, battery components and critical minerals.

Energy credits and incentives - Direct pay & transferability

Direct pay:

- Taxpayers that fall within the definition of ‘applicable entities’ (i.e., tax-exempt entities, state & local governments, etc.) can elect to be treated as having made a payment of tax equal to the value of the credit they were eligible for
- The limitation on applicable entities does NOT apply to credits for:
  - Carbon capture and sequestration (Section 45Q)
  - Clean hydrogen (Section 45V)
  - Advanced manufacturing production credit (Section 45X)

Transferability:

- Generally, entities that are not applicable entities under the direct pay rules may transfer tax credits to third parties
- Transfer may be for all or a portion of a credit
- No re-transfers allowed, and no deduction for buyer or income inclusion for seller

Treasury and IRS Request Comments on Implementing the Inflation Reduction Act's Clean Energy Tax Incentives

Issued October 5, 2022
Responses requested by November 4, 2022, though comments will be accepted thereafter

1. Energy Generation Incentives: Production Tax Credit, Investment Tax Credit, ZeroEmission Nuclear Credit, Clean Electricity Production Credit, Clean Electricity Investment Credit, Low Income Community Adder to Investment Tax Credit
2. Credit Enhancements: Prevailing Wage, Apprenticeship, Domestic Content, Energy Communities provisions that increase the value of multiple credits
3. Incentives for Homes and Buildings: Energy Efficient Home Improvement Credit, Residential Clean Energy Credit, New Energy Efficient Home Credit, Energy Efficient Commercial Building Deduction
4. Consumer Vehicle Credits: Clean Vehicle Credit, Credit for Pre-Owned Clean Vehicles
5. Manufacturing Credits: Advanced Energy Project Credit, Advanced Manufacturing Production Tax Credit
6. Credit Monetization: Direct Pay, Transfer of Certain Credits

Technology/Activity Incentivized	Incentive/Benefit	Direct Pay for "Applicable Entities"	Expanded Direct Pay Option	Transferable
Wind, Biomass, Geothermal, Solar, etc. *Section 45	The PTC provides a tax credit for each kilowatt of electricity produced from qualifying facilities and sold to an unrelated party over a 10-year period from the placed-in-service date. Alternatively, taxpayers are able to elect to the ITC. Qualifying resources are generally sources of **renewable electricity, including wind, biomass, municipal solid waste (including landfill gas and trash), geothermal, hydropower, and marine and hydrokinetic energy.** The Act extends the current-law section 45 PTC, for facilities that begin construction before January 1, 2025, and extends the provisions to **solar facilities**. The bill provides taxpayers the option of a base credit rate of 0.3 cents/kilowatt hour, or a bonus credit rate of 1.5 cents/kilowatt hour (indexed to inflation) for facilities that meet the prevailing wage and apprenticeship requirements. If a facility meets the domestic content requirements, the credit rate is increased by 10%. The credit rate may also be increased by locating the facility in a "low income" or "energy community." The prevailing wage and apprenticeship requirement is deemed satisfied if construction begins within 60 days after the IRS releases guidance or if the facility's maximum net output is less than 1 MW.	✓	✗	✓
Solar, Geothermal Heat Pumps, Battery Storage, Biogas Fuel Cells, Waste Energy Recovery Property, etc. *Section 48	The ITC allows taxpayers to claim a tax credit based on the eligible cost of energy property. The ITC in a one time credit that is received when the taxpayer places the asset in service. The Act provides a base credit rate of 2% or 6% or a bonus credit rate of 10% or 30% of the basis of energy property placed in service after December 31, 2021. To claim the bonus credit rate, taxpayers must satisfy the prevailing wage and apprenticeship requirements. The 6% and 30% bonus rates would be provided for **solar energy property, geothermal property, fiber-optic solar property, fuel cell property, microturbine property, small wind property, offshore wind property, combined heat and power property, and waste energy recovery property** that begins construction before January 1, 2025. The ITC would be extended with 6% base and 30% bonus rates for geothermal heat pump property that begins construction before January 1, 2033. The ITC is extended with 2% base and 10% bonus rates for microturbine property that begins construction before January 1, 2025. The ITC would be expanded to include **energy storage technology, biogas property, microgrid controllers, dynamic glass, and linear generators.** These technologies would be eligible for a 6% base credit rate or a 30% bonus credit rate for any property that begins construction before January 1, 2025. Taxpayers may claim an increased credit with respect to energy property placed in service after December 31, 2022, if such property meets the **domestic content requirements**. The increase would be 2 percentage points (or 10 percentage points if the taxpayer meets the prevailing wage and apprenticeship requirements). For any energy property that is placed in service within an energy community, the credit percentage would be increased by 2 percentage points (or 10 percentage points if the taxpayer meets the prevailing wage and apprenticeship requirements). This bill would provide an enhanced incentive for solar and wind facilities qualifying for the section 48 ITC with respect to which Treasury makes an allocation of environmental justice solar and wind capacity limitation. The prevailing wage and apprenticeship requirement is deemed satisfied if construction begins within 60 days after the IRS releases guidance on these requirements or if the facility's maximum net output is less than 1 megawatt.	✓	✗	✓

Technology/Activity Incentivized	Incentive/Benefit	Direct Pay for "Applicable Entities"	Expanded Direct Pay Option	Transferable
Clean Electricity - Technology Neutral *Section 45Y	Taxpayers can choose between a PTC under Section 45Y or an ITC under Section 48E that is provided based on the carbon emissions of the electricity generated. This is a "technology-neutral" incentive so that any innovative technologies for producing or storing electricity could qualify for the credits, so long as the facility's carbon emissions are at or below zero. Taxpayers electing the PTC would receive a credit equal to up to 1.5 cents per kilowatt hour of electricity produced and sold in the 10-year period after a qualifying facility is placed in service. The credit is set to phase out the latter of 2032 or when emission targets are achieved: when the electric power sector emits 75% less carbon than 2022 levels, the incentives will be phased out over 3 years. Facilities will be able to claim a credit at 100% value in the first year, 75% in the second year and then 50% in the third year. This provision applies to facilities placed in service after December 31, 2024.	☑	☒	☑
Clean Electricity - Technology Neutral *Section 48E	Taxpayers can choose between a PTC under Section 45Y or an ITC under Section 48E that is provided based on the carbon emissions of the electricity generated. This is a "technology-neutral" incentive so that any innovative technologies for producing or storing electricity could qualify for the credits, so long as the facility's carbon emissions are at or below zero. Taxpayers electing the ITC would receive a credit worth up to 30% of the investment in the year the facility is placed in service. Standalone energy storage property also would be eligible for the full 30% ITC. Clean energy projects smaller than 5 megawatts would be allowed to include the costs of interconnection under the clean electricity ITC. The credit is set to phase out the latter of 2032 or when emission targets are achieved: when the electric power sector emits 75% less carbon than 2022 levels, the incentives will be phased out over 3 years. Facilities will be able to claim a credit at 100% value in the first year, 75% in the second year and then 50% in the third year. This provision applies to property placed in service after December 31, 2024.	☑	☒	☑
Carbon Capture *Section 45Q	For carbon capture facilities or equipment placed in service after December 31, 2022 and the construction of which begins before December 31, 2032. Credit is available for a 12-year period from the placed in service date. To qualify for the credit, direct air capture facilities must capture no less than 1,000 metric tons of carbon oxide per year; electricity generating facilities must capture no less than 18,750 metric tons of carbon dioxide and 75% of the baseline carbon emissions from each generating unit on which carbon capture equipment is installed; and other facilities must capture no less than 12,500 metric tons of carbon dioxide per year. The Act provides a base credit rate of $17 or a bonus credit rate of $85 per metric ton of carbon oxide captured and sequestered in geological storage and a base credit rate of $12 or a bonus credit rate of $60 per metric ton of carbon oxide captured and utilized in an enhanced oil recovery project or for a commercial use that results in permanent sequestration. The bill also would provide an enhanced credit for direct air capture facilities at a base rate of $36 or a bonus rate of $180 per metric ton of carbon oxide captured for geological storage and a base rate of $26 or a bonus rate of $130 per metric ton of carbon captured and utilized for an allowable use by the taxpayer.	☑	☑	☑

Technology/Activity Incentivized	Incentive/Benefit	Direct Pay for "Applicable Entities"	Expanded Direct Pay Option	Transferable
Clean Hydrogen *Section 45V	New tax credit for the production of clean hydrogen produced by a taxpayer at a qualified clean hydrogen facility during the 10-year period beginning on the date such facility is placed in service. The amount of the credit is equal to the applicable percentage of the base rate of $0.60 or the bonus rate of $3.00, indexed to inflation, multiplied by the volume (in kilograms) of clean hydrogen produced by the taxpayer at a qualified facility during the taxable year. The applicable percentage is determined by the lifecycle greenhouse gas emission rate achieved in producing clean hydrogen. A taxpayer may elect to treat a qualified clean hydrogen facility as energy property for purposes of the Section 48 ITC	✓	✓	✓
Reducing Carbon Emissions at Industrial Facilities *Section 48C	Projects receive a base credit rate of 6 percent of qualified investments in qualified advanced energy projects. To receive a bonus rate of 30 percent, taxpayers must satisfy the prevailing wage and apprenticeship requirements. This includes projects to establish, expand, or re-equip facilities for the production, manufacturing, or recycling or advanced grid, energy storage, and fuel cell equipment; equipment for the production of low-carbon fuels, chemicals, and related products; renewable energy and energy efficiency equipment; equipment for the capture, removal, use, or storage of carbon dioxide; and advanced light-, medium-, and heavy-duty vehicles and related components and infrastructure. **The credit also would be allowed for projects that reduce carbon emissions at existing industrial facilities by at least 20% through the installation of low carbon process heat systems, carbon capture, transport, utilization and storage systems, and other energy efficiency measures.** Treasury would determine allocations to projects each year with a requirement that property is placed in service within four years of the date of the allocation. A rule denies a double benefit for any qualified investment for which a credit is allowed under section 48B, 48E, 45Q, or 45V. An application process is required.	✓	✗	✓
Advanced Manufacturing Production Credit *Section 45X	A credit for each eligible component that is produced in US and sold. Eligible components include solar polysilicon, wafers, cells, modules, backsheets, longitudinal purlins, and structural fasteners; wind blades, nacelles, towers, and offshore foundations; inverters; battery electrode active materials, cells, and modules; and critical minerals.The credits are provided based on mass, watt-capacity, sales price, or production cost. Credits start to phase out in FY30, and are unavailable starting FY33 (i.e., with the exception of critical minerals). The credit cannot be claimed for the production and sale of any component manufactured at a facility for which an advance energy property credit under Code Sec. 48C.	✓	✓	✓

Technology/Activity Incentivized	Incentive/Benefit	Direct Pay for "Applicable Entities"	Expanded Direct Pay Option	Transferable
Electric Vehicles *Section 45W	New tax credit for qualified commercial electric vehicles placed into service by the taxpayer. The amount of the credit allowed is equal to 30 percent of the cost of the vehicle, up to $7,500 in the case of a vehicle that weighs less than 14,000 pounds, and up to $40,000 for all other vehicles. A qualified commercial electric vehicle means any vehicle the original use of which commences with the taxpayer; acquired for use or lease by the taxpayer and not for resale; made by a qualified manufacturer; treated as a motor vehicle for purposes of title II of the Clean Air Act or mobile machinery for purposes of section 4053(8); propelled to a significant extent by an electric motor that draws electricity from a battery which has a capacity of not less than 15 kilowatt hours (seven kilowatt hours for vehicles that weigh less than 14,000 pounds) and is capable of being recharged from an external source of electricity; and is of a character subject to the allowance for depreciation.	☑	☒	☒
Zero emissions charging and refueling infrastructure *Section 30C	The Act extends the 30C credit through 2022 and starting in 2023, would expand the credit for zero-emissions charging and refueling infrastructure by providing a base credit of 6% and a bonus credit level of 30% for expenses up to $100,000 for each charging station or refueling pump installed. Additionally, starting in 2023, charging or refueling property would be eligible only if it is placed in service within a low-income or rural census tract.	☑	☒	☑
R&D	The Research & Development ("R&D") Tax Credit provides up to an 11% net federal cash benefit for Qualified R&D Expenses ("QRE") occurring in the United States. There are currently two credit methods available for taxpayers to calculate Federal research credits, the Traditional credit method and the Alternative Simplified Credit ("ASC") method. The spend for environmental and sustainability initiatives may be eligible for research credits (e.g., development and improvements related to sustainable products and packaging, new or improved manufacturing processes, supply chain innovation, water and energy sustainability process improvements, etc.). Additional state incentives are available in most states.	☒	☒	☒

Technology/Activity Incentivized	Incentive/Benefit	Direct Pay for "Applicable Entities"	Expanded Direct Pay Option	Transferable
Sustainable Aviation Fuel *40B	Applies to fuel *sold or used* after December 31, 2022.through December 31, 2024 ●Credit is for the producer/blender. ● Comprised of any sale or use of a qualified mixture which occurs during the tax year. ●An amount equal to the product of the number of gallons of sustainable aviation fuel in such mixture multiplied by the sum of (1) a base credit amount of $1.25 plus (2) the applicable supplementary amount ○*Applicable supplementary amount* - $0.01 for each percentage point above 50% for which the aviation fuel is certified to reduce emissions as in comparison with petroleum jet fuel. The maximum applicable supplementary amount is 50 cents.			
Clean Fuel Production *45Z	Applies to transportation fuel produced after December 31, 2024. The credit amount is equal to the product of the emissions factor and the applicable amount per gallon produced at a qualified facility and sold in a qualified manner. The applicable amount per gallon for fuel other than sustainable aviation fuel is $0.20, but can be increased to $1.00 if prevailing wage and apprenticeship requirements are met. These amounts are $0.35 and $1.75, respectively, in the case of sustainable aviation fuel, which must meet certain ASTM standards and not be derived from palm oil.No credit shall be allowed at a facility that that is taking a credit for 45V (or a corresponding ITC), or 45Q. The credit is not available for fuel sold after December 31, 2027.			
Energy Efficiency ***Section 179D**	An accelerated deduction, up to $1.00 per square foot (base deduction), or a bonus deduction up to $5.00 per square foot, is available for certain energy efficient building expenditures, including interior lighting systems, HVAC/ hot water systems and building envelope costs, that reduce the building's total energy and power cost by 25% or more (in comparison to a building meeting minimum requirements set by ASHRAE Standards). Companies that own or lease commercial buildings are eligible.			

Thank you!

www.pwc.com

5. **Presentation: Microsoft HoloLens 2**

   Facilitator: Todd Van Nurden, Principal Cloud Architect, Microsoft
   (or designee)
   Microsoft HoloLens 2 is an ergonomic, untethered self-contained holographic device with enterprise ready applications to increase user accuracy and output.

   - Used to accelerate the pace of design, lower rework instances, and engage customers in new ways
   - Can identify risks earlier and accurately validate designs and install conditions from early-stage design through to construction
   - Discussion and Public Input

Microsoft

Augmented Reality in Construction, Engineering and Architecture

Mixed Reality/Metaverse

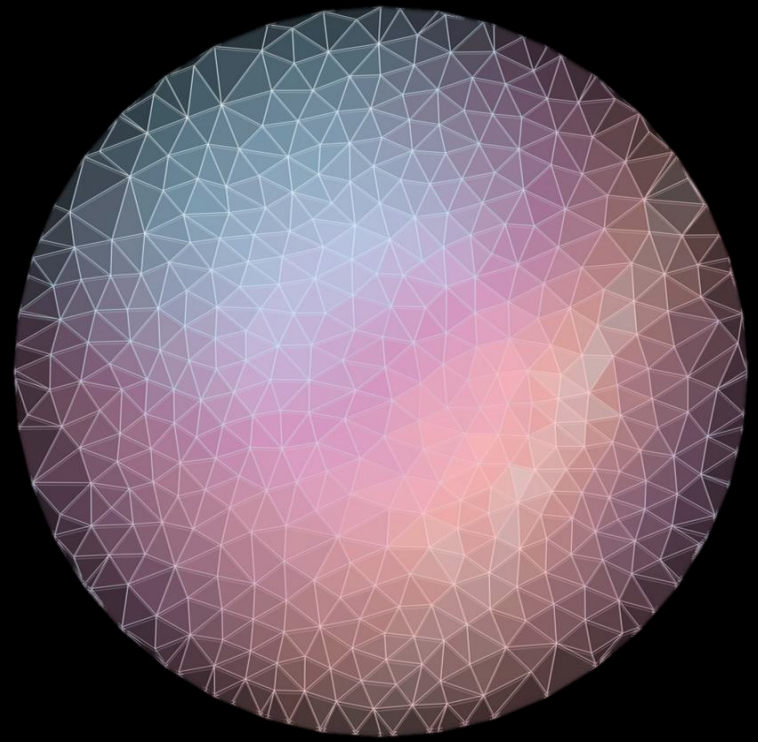
Mixed Reality/Metaverse

blends the physical and digital worlds

PHYSICAL WORLD

MIXED REALITY

DIGITAL WORLD



Mixed Reality is here.

Companies are creating a new reality for work

1 in 3

enterprises support multi-experience platforms, including augmented reality.

Gartner Strategic Technology Trends, 2020

Industry Trends

Construction Services & Real Estate Development trends

Global construction output of all types exceeds $7 trillion and, according to Global Construction Perspectives and Oxford Economics, is expected to reach $15.5 trillion by 2030.[1,2]

DESIGN-BUILD

The growing design-build movement encourages collaborative project development.[1,2]

URBANIZATION

The world's population is becoming increasingly concentrated in urban areas.[1]

GREEN BUILDING

Demand is growing for environmentally friendly building and construction materials, practices and certification.[2]

EMERGING MARKETS

Developing countries provide some of the greatest opportunities for construction expansion.[2]

MODULAR CONSTRUCTION

Permanent modular construction (PMC) can enhance the speed and efficiency of project completion.[1]

Engineering & Construction Industry Value Chain

Traditional Activities

Planning
- Plan and schedule work
- Cost control or proper budget control
- Contract management with customer and other stakeholders

Design & Engineering
- Concept and value proposition design
- Commercial Viability
- Research and Development
- Creation and Testing of prototypes

Construction
- Procurement of the necessary resources from all external sources
- Update schedule and stakeholders on project progress
- Employee training
- Asset monitoring

Operations
- Scheduled maintenance activities
- Managing support network
- Maintenance services from diagnostics to preventive and complete overhauls

Growing Digital Footprint

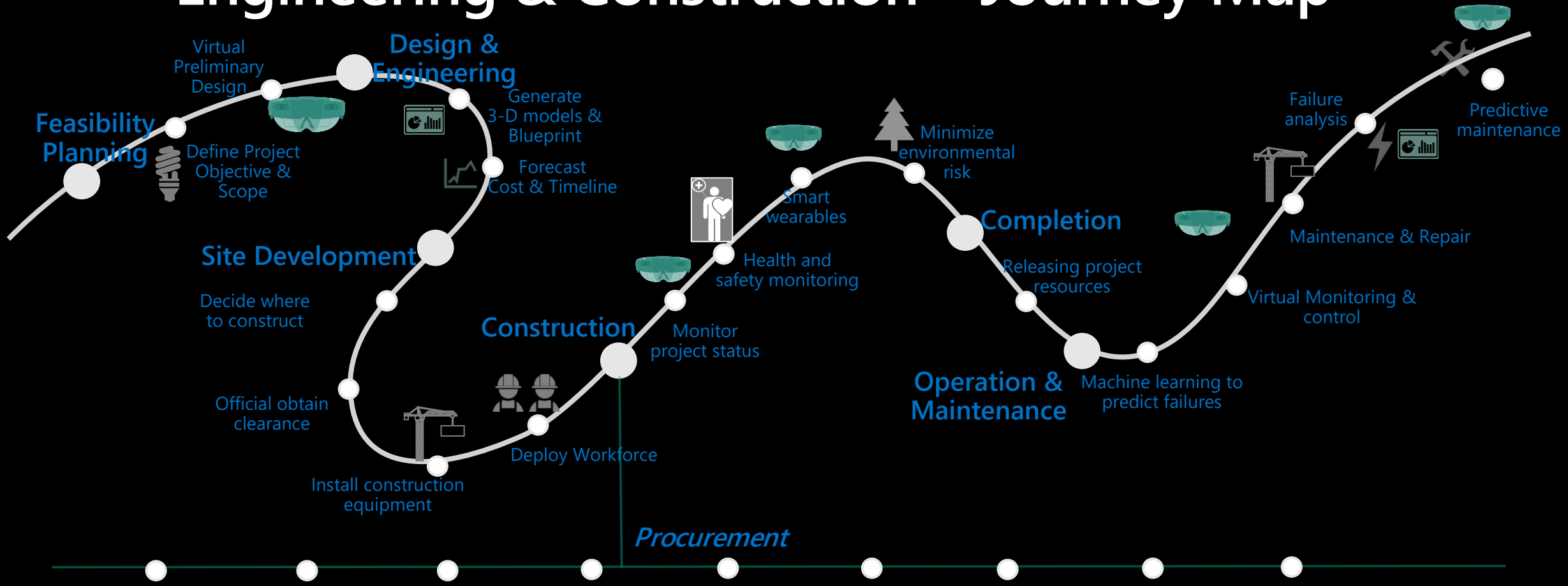
Planning
- Create assign and prioritize tasks in real time
- Building Information Modeling (BIM) – 5D modeling
- Real time push of work plan and schedules to workers
- Mobile notifications to subcontractors
- Integrated supply chain operations

Design & Engineering
- Parallel and robust design & Engineering
- Virtual migration of physical structures
- Data driven design
- Simulation and rapid prototyping
- Iterative design and engineering

Construction
- Real time data sharing, integration & coordination among stakeholders
- Digital Asset Management
- Asset information Mgmt.
- Asset condition monitoring
- Digital Field worker with mobile access to maps, data, work-mgmt. tools, and real time expertise
- Automated and autonomous construction

Operations
- BIM enhanced operations and maintenance
- Virtual handover and commissioning
- Condition monitoring and predictive maintenance
- Faster decision making and efficient terminations

Engineering & Construction – Journey Map



Digital Hotspots

- Virtual design & simulation
- Generation of 3-D models & Blueprints
- High definition surveying & geolocation
- Workforce collaboration
- Transparent project reporting & monitoring
- Smart wearables & handheld devices for real-time data capturing & analysis
- Minimize environmental risk & increase green footprint
- Machine learning to predict failures
- Predictive maintenance
- Business Intelligence to analyze power & machine failures
- Virtual monitoring & control

Engineering & Construction Industry – Ripe for Disruption

Large capital projects typically take

20% longer to finish

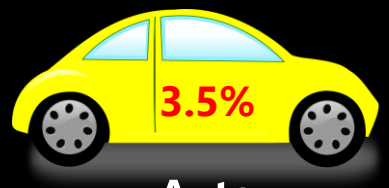
… and are upto

80% over budget

R&D spend in construction runs well behind other industries

(figures are average percent of revenues)

Construction



Auto

Aerospace

5 Big Ideas poised to disrupt construction

1. Higher definition surveying & geolocation
2. 5-D Building Information Modeling
3. Digital Collaboration & Mobility
4. The Internet of Things and Advanced Analytics
5. Future-proof design and construction

For the industry to do better, it needs to embrace 4 principles

1. Transparency & risk sharing in contracts
2. Return-on-investment orientation
3. Change Management
4. Simplicity and intuitiveness in the design of new solutions

Microsoft and MR

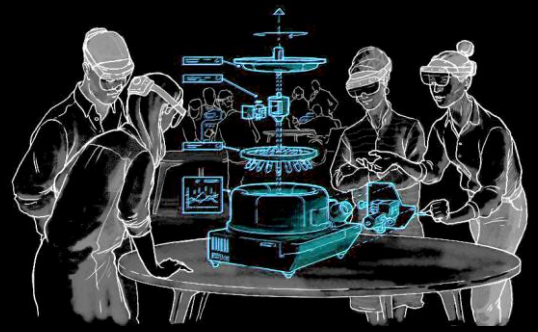
Collaborative Mixed Reality opportunities

Remote expertise

Train/learn together

Immersive meetups

In-situ information



Design together

Connect and create

Architecture Engineering Construction Partners

vGIS

Enklu

Bentley

Visual Live

vGIS

Remote Trouble Shooting


We all need help sometimes.


Remote Assist brings knowledge to need
so first-line workers can get the job done.

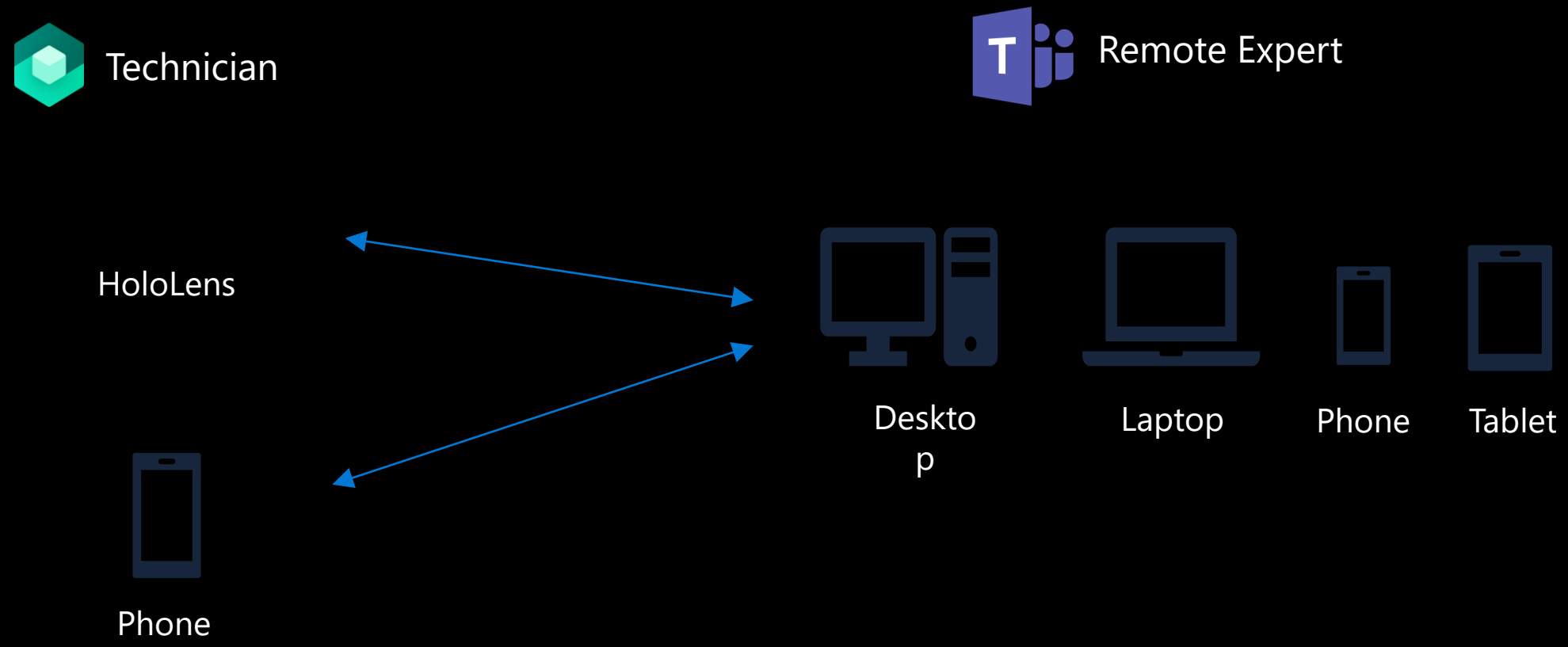
D365 Remote Assist

What is Remote Assist?

- Remote Assist allows remote participants, through Microsoft Teams, to see what a first-line worker is seeing.
- Both parties can ‘mark-up’ the first-line worker’s world in mixed-reality in order to enhance instruction and collaboration.
- Critical information like schematics or work orders can be brought into view.
- Session information can be posted back to D365 Field Service (CDS)

D365 Remote Assist

Cross Platform Offering



D365 Remote Assist

Why Remote Assist?

Most Secure Remote Assistance App in the Market

Low Ramp Up and Maintenance

Always have support and direct contact to Remote Assist Product Team

Integrated with your favorite Microsoft Products

Get improvements and new releases at a rapid pace

Current Product Features

Remote Assist HoloLens

Azure Active Directory Authentication

1:1 and group video calling between a technician and remote expert

Collaborative AR annotations

Upload Documents and Media directly from your PC or OneDrive

In Call Text Chat for notes and links

Call data captured to D365 Field Service work order

Accelerated Skilling

Introducing

Dynamics 365 Guides

Unique value of mixed reality

Create, collaborate, learn in new ways

Organizations across industries are using mixed reality to improve collaboration across cross-functional teams and upskill employees.

Increase efficiency and quality

Employees get more done on the job with the information and data they need in the physical context of their work.

Empower all employees

Bring innovative technology and drive digital transformation with firstline workers, an audience traditionally underserved by technology.

Dynamics 365 Guides

Reduce errors and help increase safety

Provide employees with step by step guided instruction to reduce errors and showcase warnings and safety hazards in place so they know what to avoid while they work.

Standardize skills and reinforce compliance

Capture best practices in standardized instructions that move with employees as they work, so no step is missed. Equip managers to create guides, with no coding or mixed reality experience required.

Increase retention and close knowledge gaps

Quickly deploy skill-building initiatives that target a specific gap within a team and create consistency across locations enabling employees to have confidence with new tasks and processes.

Improve training and processes

Onboard employees and aggregate their task performance data into real-time Microsoft Power BI dashboards, making it easier to identify where process improvements are needed.

The role of Dynamics 365 Guides in your organization

Assembly
Show employees the tools and parts they need and how to use them in real work situations.

Service
Equip technicians with guided instructions at the job site, eliminating the need to schedule additional visits.

Operations
Rollout new processes with increased consistency by turning employee knowledge into a repeatable tool.

Certification
Ensure every employee meets high standards by quickly identifying who needs help where.

Safety
Experience dangerous procedures virtually before attempting in the physical environment.

Unfamiliar equipment or process

Ongoing training

Standardization and compliance

The next breakthrough in Mixed Reality

Moving from individual to shared experiences

6. Technology and Research Committee Goals for 2023

Facilitator: Bruce Rainey, Committee Chair (or designee)

- Discuss goals for the Committee in the coming year
- Discussion and public input

4. **Comments from the Public/Committee Members on issues not on this agenda**

Facilitator: Bruce Rainey, Committee Chair (or designee)

The committee will receive comments from the Public/Committee Members. Matters raised at this time may be taken under consideration for placement on a subsequent agenda.