

THE ECONOMIC IMPACT OF DANCE ARTS IN ARIZONA



Ballet Yuma, Photo by Katie Gina Photography.

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Executive Summary

This analysis attempts to bring together these varied facets of the dance industry and quantify the economic contribution that these businesses and their employees create in the state of Arizona. These economic contributions stem from the operations of dance-related businesses, including sole-proprietors and non-profit organizations, as well as the contributions created by visitors who come to Arizona to participate in competitions, workshops and festivals throughout the year.

The dance industry in Arizona is represented by a wide range of different types of businesses and organizations. It includes professional dance companies as well as a large number of dance studios, dance service organizations and producers of competitions and events. In addition to these organizations, there are many sole proprietors working as performers, educators, choreographers, authors and producers. There are also dance instructors and educational program administrators working with in larger organizations including high schools, community colleges, universities and other education providers. The dance industry is also closely tied to a variety of other industries such as set and costume designers, stage and sound crews, sellers of dance shoes, apparel and equipment that are reliant on dance in Arizona.



Liana Corona, University of Arizona School of Dance.

Photo by Ed Flores.

- All total, the economic contributions associated with the dance industry in Arizona are estimated at \$38.3 million per year, directly and indirectly supporting 1,100 jobs and \$14.2 million in annual labor income in the state in 2019.
- The results of the analysis include 104 dance companies, studios, sole proprietors and dance instructors employed by other educational institutions. In total, the dataset used for this analysis accounts for 966 employees and \$8.3 million in annual employee and proprietor income, and \$18.5 million in annual gross revenues from the dance industry in Arizona.
- These organizations and individuals in the dance industry make local purchases of goods and services to support their operations estimated at \$5.7 million per year. In addition, local competition and festival promoters spend an estimated \$0.7 million per year on venues, building services and other services related to event production. As a result of the multiplier effect, these local purchases support an indirect economic contribution of \$9.1 million, supporting 60 jobs and \$2.5 million in annual labor income at other types of businesses in the state that support the dance industry.
- Employees, contractors and proprietors associated with businesses in the dance industry also make consumer expenditures locally that support induced economic contributions of \$9.2 million per year, along with an estimated 58 jobs and \$2.9 million in annual labor income.

- The various dance events, competitions and workshops hosted in Arizona each year attract a significant number of local visitors. Based on information for 14 annual events and 10 major venues that host dance performances and competitions, it is estimated that over 4,000 out-of-state performers and participants travel to Arizona each year as a result of the dance industry. Through their spending on lodging, food, retail and local transportation, these visitors create an annual economic contribution of \$1.6 million.
- According to a 2017 survey by the National Endowment for the Arts, 43 percent of adults in Arizona and 49 percent of adults nationally attended a performing arts event in that year. These statistics highlight the universal appeal of the performing arts, and the importance of measuring the impacts.

Introduction

This analysis, commissioned by the Arizona Dance Coalition, quantifies the economic contribution of the dance industry in Arizona. While we typically think of the qualitative benefits of dance in terms of how it enriches quality of life and cultural understanding, the dance industry also creates quantifiable economic impacts. This analysis includes a broad range of different types of dance-related businesses including dance companies; self-employed artists, educators, choreographers and performers; dance studios and other dance businesses; and employees of schools, colleges and universities that provide dance instruction or administration. All of these businesses support employees and payroll, and also make local purchases for a wide range of goods and services. In addition, this analysis considers the impacts of dance events such as competitions, workshops, performances and festivals that attract out-of-state visitors to Arizona.



Grand Canyon University, Ethington Dance Ensemble.
Photo courtesy of Arizona Dance Coalition.

The Arizona Dance Coalition is a non-profit organization that was founded in 2006. Their mission is to connect, inform and educate those in the dance community including dancers, dance companies, studios, choreographers, venues and other service providers related to the dance industry, and to promote the value of dance arts to the public.

The information used to conduct this economic contribution analysis is based in part on an on-line survey conducted by the Arizona Dance Coalition in the first quarter of 2022. There were three versions of the survey including one for self employed individuals and sole proprietors, one for employees, and one for dance organizations such as dance companies, schools, teams and similar businesses related to the dance industry. The survey included information about the number of full and part time employees, payroll, contractors and related labor costs, annual revenues, detailed local spending patterns, and number of supported visitor days. The information collected in the survey was for calendar year 2019, and intentionally did not reflect the impacts of the COVID-19 pandemic in 2020 and 2021, which was devastating to the dance industry and to the performing arts in general. A total of 93 individuals and organizations completed the survey (**Figure 1**). An additional 11 dance companies and organizations were added to the dataset using data from IRS form 990 that is filed by all non-profit organizations.

Figure 1
Arizona Dance Organizations Represented in the Economic Analysis

Type of Organization	Number of Survey Respondants	Additional Organizations Added from IRS Form 990	Total Organizations Represented
Dance Companies	28	10	38
Self Employed Educators, Dancers and Choreographers	23	0	23
Studios and Other Dance Organizations	24	1	25
Employees of Other Educational Institutions	18	0	18
Total	93	11	104

It is difficult to determine the comprehensiveness of the data represented here using secondary sources such as government employment estimates because so many aspects of the dance industry are combined with other performing arts in terms of standard industry classifications. The table below shows 2021 data on employment, establishments and annual payroll for Arizona based on data from the U.S. Bureau of Labor Statistics for all industry classifications that include dance as a component. These performing arts industries as a whole represented close to 4,600 jobs and 915 establishments in Arizona in 2021 (**Figure 2**). The average annual wage for these five industries combined is \$32,200 for 2021.

Figure 2
Employment, Establishments and Payroll for Dance and Other Performing Arts Industries
State of Arizona – 2021

NAICS	Industry	Establishments	Employment	Annual Wages
611610	Fine Arts Schools	243	1,355	\$24,122,000
711120	Dance Companies	32	197	\$5,442,000
711310	Promoters with Facilities	89	1,726	\$40,168,000
711320	Promoters without Facilities	104	650	\$32,139,000
711500	Independent Artists, Writers & Performers	447	635	\$44,982,000
Total		915	4,563	\$146,853,000

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2021.

Statewide data is also available from the Census Bureau Economic Census, which is conducted every five years, and shows a total of 667 establishments and more than 5,200 employees in Arizona in 2017 with total gross receipts of \$611 million, or an average of \$916,000 per establishment (**Figure 3**). The average annual wage for these five industries for 2017 is \$22,400. This data is from a different source than the data in Figure 2, but provides another estimate of the overall size of dance and performing arts industries in Arizona.

Figure 3
Employment, Establishments, Payroll and Gross Receipts
for Dance and Other Performing Arts Industries
State of Arizona – 2017

NAICS	Industry	Estab- lishments	Employment	Annual Payroll	Gross Receipts
611610	Fine Arts Schools	240	1,736	\$27,290,000	\$86,849,000
711120	Dance Companies	9	111	\$660,000	\$9,265,000
711310	Promoters with Facilities	54	1,546	\$24,942,000	\$137,956,000
711320	Promoters without Facilities	97	1,316	\$30,849,000	\$260,711,000
711500	Independent Artists, Writers & Performers	267	525	\$33,328,000	\$116,183,000
Total		667	5,234	\$117,069,000	\$610,964,000

Source: Bureau of the Census, 2017 Economic Census Geographic Area Statistics for NAICS Sector 71.

In addition to capturing the individuals and organizations in the dance industry in Arizona, this analysis also captures the economic impacts of visitor spending related to dance festivals, performances, competitions, workshops and other events that attract performers and participants from outside the state. The Arizona Dance Coalition collected information about the number of performers, audience size, event costs and duration for 14 annual events. Information about dance performances and competitions was also collected for 10 local venues that host dance events. This data is used in the visitor impact estimates.

The results of this quantitative analysis can be used to support fundraising, marketing, strategy development, and to inform local patrons and stakeholders about the level of economic activity that is supported by the dance industry in Arizona in terms of jobs, labor income and output. While other impact studies have been done for the performing arts in Arizona, this study is unique in that it attempts to specifically identify the impacts associated with the dance industry.

Economic Contributions of Operations

Economic impacts measure the effects of economic stimuli, or expenditures, in the local economy. These impacts include direct, indirect and induced jobs, labor income and output associated with the dance industry in Arizona. Indirect and induced impacts are the result of the multiplier effect and capture supported supplier and consumer businesses and their employees in Arizona that benefit from the dance industry. Economic impact analysis typically applies to new spending or stimuli in the economy. In this case, since the analysis measures economic activity associated with existing businesses in the dance industry, the term economic “contribution” analysis is used rather than economic “impact” analysis.

The economic contributions of dance industry businesses presented here are based on data on employment, payroll and gross revenues for individuals and organizations that are included in the Arizona Dance Coalition Survey and 990 filings for non-profit dance businesses.¹ These 104 responses represent 966 individuals that were employed full-time, part-time, or as contractors in the dance industry in Arizona in 2019. These businesses and individuals represent \$18.5 million in gross annual revenues and \$8.3 million in annual employee payroll and proprietor income (**Figure 4**). These figures represent the direct impacts of the dance industry.



The School of Ballet Arizona students.
Photo by Brianne Bland.

Direct Economic Contributions

The results of the economic contribution analysis presented here are grouped into direct, indirect and induced contributions. Direct contributions include the operations of the 104 companies, sole proprietors and other organizations represented in the survey data. Indirect and induced contributions include local vendor purchases made by dance organizations local, and consumer spending by employees and proprietors. Induced impacts also include establishments where visitors make purchases, which will be described in a separate section of the report. The total economic contribution is the sum of the direct contributions of dance industries plus the indirect and induced contributions created by other local businesses and their employees.

¹ Some of the data used for this report pertaining to nonprofits was provided by SMU DataArts, an organization created to strengthen arts and culture by documenting and disseminating information on the arts and culture sector. Any interpretation of the data is the view of Arizona Dance Coalition and does not reflect the views of SMU DataArts. For more information on SMU DataArts, visit www.culturaldata.org

Figure 4
Direct Economic Contributions of the Dance Industry

Type of Organization	Direct Contribution		
	Employees & Contractors	Labor Income*	Output
Dance Companies	557	\$6,670,840	\$14,218,830
Self Employed Educators, Dancers and Choreographers	23	\$337,852	\$674,929
Studios and Other Dance Organizations	368	\$705,406	\$2,357,361
Employees of Other Educational Institutions	18	\$601,671	\$1,201,961
Events and Venue Rentals			
Total	966	\$8,315,769	\$18,453,081

Note: Labor income includes employee and proprietor income.

Indirect Economic Contributions

As part of their economic contribution to the state, individuals and organizations in the dance industry purchase a wide range of goods and services from local vendors. Detailed information from the on-line survey and IRS 990 filings includes detail on specific types of expenditures. A summary of purchases by type is detailed in **Figure 5**. All total, the individuals and organizations in the dataset used in this analysis made an estimated \$5.7 million in local vendor



Students in Ballet Arizona's production of Ib Andersen's "Don Quixote." Photo by Tzu Chia Huang.

purchases in 2019. The most significant purchases were for production costs (sets, costumes, facility rentals), rent and advertising. This data on purchases forms the basis for the indirect economic contributions. Local purchases from vendors support employment, payroll and sales at the types of businesses detailed in Figure 4. Those businesses in turn make additional rounds of purchases to support their operations, which creates additional economic contributions. There are also revenues or economic output created by dance-related events and by venue rentals. Based on information collected by the Arizona Dance Coalition, these events and venue rentals account for \$766,000 in annual expenditures.

In order to estimate the indirect economic contributions associated with local purchases of goods and services by the dance industry, economic multipliers that are specific to each industry are applied to expenditures by type. All total, the \$5.7 million in estimated operations expenditures, and \$766,000 in expenditures related to events in 2019, supported an indirect economic

contribution estimated at \$9.1 million, along with 60 jobs and \$2.5 million in annual labor income or payroll (**Figure 5**).

Induced Economic Contributions

The employees and contractors for the dance organizations and the supported indirect employees associated with local vendors make household purchases that represent the induced economic contributions of the dance industry. A portion of employee payroll and proprietor income is spent at local establishments, and this in turn supports other local retail and service businesses. This local employee spending supported an induced economic contribution of \$9.2 million in 2019, along with an estimated 58 jobs and \$2.9 million in annual labor income (**Figure 6**).



Angels in Ib Andersen's *The Nutcracker*, Ballet Arizona.
Photo by Alexander Iziliaev.

Figure 5
Local Purchases by the Dance Industry

Type of Expenditure	Annual Local Spending				Total
	Dance Companies	Self Employed Educators, Dancers & Choreographers	Studios and Other Dance Organizations	Employees of Education Providers	
Management/Administration	\$55,950	\$0	\$0	\$0	\$55,950
Legal Services	\$4,509	\$0	\$0	\$0	\$4,509
Accounting	\$24,624	\$375	\$0	\$0	\$24,999
Fundraising	\$63,523	\$0	\$0	\$0	\$63,523
Investment Management	\$31,888	\$0	\$0	\$0	\$31,888
Advertising	\$780,789	\$21,050	\$0	\$0	\$801,839
Office Supplies	\$73,003	\$6,207	\$20,470	\$355	\$100,035
IT/Website Development	\$115,967	\$415	\$6,699	\$0	\$123,081
Local Royalty Fees	\$71,627	\$155	\$174	\$0	\$71,956
Rent	\$656,821	\$21,470	\$203,139	\$0	\$881,430
In-State Travel	\$55,572	\$19,450	\$8,144	\$0	\$83,166
Insurance	\$79,420	\$5,090	\$8,061	\$0	\$92,571
Production Cost (Costumes, Sets, Facility Rental)	\$1,398,228	\$0	\$0	\$0	\$1,398,228
Artistic					
Services/Choreography/Design	\$24,901	\$0	\$0	\$0	\$24,901
Photography	\$1,200	\$430	\$295	\$0	\$1,925
Competitions/Conventions	\$234,419	\$0	\$41,105	\$10,500	\$286,024
Contract Services	\$381,100	\$0	\$0	\$0	\$381,100
Costumes/Costume					
Repair/Dancewear	\$181,552	\$9,570	\$58,214	\$7,002	\$256,338
Dancers	\$31,199	\$0	\$0	\$0	\$31,199
Equipment Expenses	\$84,655	\$3,844	\$9,109	\$11,600	\$109,208
Equipment and Backdrop Rental (Production)	\$32,323	\$0	\$0	\$0	\$32,323
Instructor Administrative Fees/Class Expense	\$71,186	\$9,120	\$200	\$1,850	\$82,356
Facility Maintenance	\$474	\$0	\$0	\$0	\$474
Guest Musicians/Artists and Licensing	\$205,778	\$1,721	\$3,277	\$300	\$211,076
Pointe Shoes	\$35,195	\$530	\$6,461	\$1,800	\$43,986
Sound/Lighting	\$20,164	\$4,000	\$0	\$0	\$24,164
Stage Crew	\$37,283	\$0	\$0	\$0	\$37,283
Storage (Costumes, other)	\$17,881	\$0	\$0	\$0	\$17,881
Studio & Set Repairs	\$29,108	\$0	\$0	\$0	\$29,108
Supplies	\$58,120	\$0	\$0	\$0	\$58,120
Theater/Facility Expenses and Security	\$224,719	\$0	\$1,248	\$0	\$225,967
Professional Development	\$879	\$1,650	\$7,930	\$600	\$11,059
Utilities/Internet	\$22,493	\$7,632	\$16,651	\$3,110	\$49,886
Dues & Subscriptions	\$2,547	\$230	\$235	\$310	\$3,322
Concessions/Catering	\$6,982	\$0	\$10,895	\$0	\$17,877
Entertainment	\$0	\$6,500	\$0	\$0	\$6,500
Fitness Classes	\$0	\$2,600	\$120	\$800	\$3,520
Massage Therapy	\$0	\$9,650	\$0	\$6,100	\$15,750
Physical Therapy and other Health Services	\$0	\$2,988	\$0	\$9,200	\$12,188
Printing/ Graphic Design	\$0	\$0	\$19,063	\$0	\$19,063
Radio/TV Advertising	\$0	\$0	\$4,328	\$0	\$4,328
Other In-State Professional Business Expenses	\$0	\$0	\$1,365	\$50	\$1,415
Total	\$5,116,079	\$134,677	\$427,183	\$53,577	\$5,731,516

Figure 6
Indirect and Induced Economic Contributions

Type of Organization	Indirect Contribution			Induced Contribution		
	Jobs	Labor Income	Output	Jobs	Labor Income	Output
Dance Companies	46	\$2,003,290	\$7,082,737	45	\$2,225,402	\$7,066,151
Self Employed Educators, Dancers and Choreographers	2	\$68,994	\$203,888	1	\$53,197	\$168,883
Studios and Other Dance Organizations	4	\$151,276	\$621,580	6	\$311,007	\$987,513
Employees of Other Educational Institutions	1	\$29,368	\$74,993	5	\$243,030	\$772,396
Events and Venue Rentals	8	\$244,126	\$1,135,869	1	\$66,934	\$212,541
Total	61	\$2,497,054	\$9,119,067	58	\$2,899,569	\$9,207,484

Note: Labor income includes employee and proprietor income.

These indirect and induced contributions are called multiplier effects. Multiplier effects are a way of representing the larger economic effects on the local economy. The multiplier effects translate an increase in direct output (loosely defined for service industries as gross revenues) into a corresponding total increase in jobs, labor income and output. In essence, the multiplier effect represents the recycling of local spending. This recycling process creates additional business opportunities. The multipliers used in this analysis are from IMPLAN, a national vendor of economic impact software, and are specific to the economic base of Arizona. Industry-specific multipliers were used for each category of local vendor purchases, and for induced impacts related to performing arts companies, independent artists, promoters of performing arts and other educational services.



Ballet Arizona's Kate Loxtercamp.
Photo by Ron Brewer Images.

Visitor Spending

In addition to the economic contributions created by the operations of dance companies, studios, self-employed dancers, instructors and choreographers and other dance organizations, the dance industry generates induced impacts through visitor spending. Visitors include performers and attendees at events such as festivals, workshops, competitions and other public events throughout the state. It is important to note that visitor impacts are created by individuals from outside the area who come to Arizona for the purpose of attending or participating in one of these dance events and make other purchases for food, lodging, local transportation and retail items while they are in the state.



Breanna Gonzales, Ballet Folklórico de Arizona. Photo by Arturo Nevarez.

The Arizona Dance Coalition collected data from event organizers for 14 workshops, performances and social dance events in Arizona in 2019 (**Figure 7**). (Event names are excluded for confidentiality.) In total, these one to three day events attract an estimated 4,452 performers each year and an estimated audience of 154,380 local attendees. Based on information provided by event organizers, estimates were developed for the share of performers traveling from out-of-state and the number of days they stayed in Arizona. Some organizers also provided information about estimated hotel expenditures for performers.

Figure 7
Annual Dance Events in Arizona

Type of Event	Performers & Participants	Audience	Days	Event Cost
Workshop & Performance 1	1,700	800	3	\$20,000
Workshop 1	172	na	1	\$20,000
Performance 1	400	150,000	3	\$19,850
Performance 2	60	180	1	\$850
Social Dance 1	150	na	3	\$28,000
Social Dance 2	400	na	3	\$60,000
Workshop & Performance 2	150	2,000	2	\$60,000
Performance 3	80	500	2	\$10,000
Social Dance 3	250	na	2	\$30,000
Social Dance 4	200	na	3	\$15,000
Workshop 2	600	na	1	\$8,500
Performance 4	110	700	2	\$32,000
Workshop 3	140	na	2	\$2,500
Performance 5	40	200	1	\$3,500
Total	4,452	154,380	29	\$310,200

These survey respondents estimated that they supported close to 1,200 visitor days in 2019. Using the assumptions on the share of non-local performers and attendees at events, and other visitor data from the survey, it is estimated that the 4,064 visitors associated with these events and activities generated an estimated 9,489 annual visitor days in 2019 (**Figure 8**). The information on number of visitor days is used as a basis for estimating visitor spending.

Figure 8
Annual Visitor Days Associated with Dance Events in Arizona

Event/Source	Visiting Performers/ Students	Length of Stay (Days)	Visitor Days
Workshop & Performance 1	1,700	3	5,100
Workshop 1	172	2	344
Social Dance 2	750	3	2,250
Workshop & Performance 2	50	2	99
Performance 3	12	2	24
Social Dance 3	25	2	50
Social Dance 4	106	3	318
Performance 4	55	2	110
Self-Employed Dance Instructors	86	1	86
Studios and Other Dance Organizations	1,108	1	1,108
	4,064	21	9,489

In order to calculate the effects of visitor spending by non-local visitors, it is necessary to have detailed data on daily spending habits. This analysis uses spending patterns from the Arizona Office of Tourism and Longwoods International. According to the Arizona Office of Tourism, the average visitor to Arizona spends approximately \$120 per day on lodging, food, shopping (retail), local transportation and entertainment/recreation. For attendees at dance events, it is assumed that all entertainment and recreation expenditures take place at the event, therefore total expenditures are estimated at \$101 per day, excluding event fees which are included in the indirect economic contributions. Applying per person visitor expenditure levels to the estimated number of non-local visitors results in projected visitor expenditures of about \$793,000 related to the dance industry in 2019 including lodging, food, retail and local transportation (**Figure 9**). Applying economic multipliers to each type of spending, it is estimated that these visitors generate annual economic output of \$1.6 million, supporting 16 FTE jobs and \$511,000 in labor income during a typical year.

Figure 9
Estimated Visitor Contributions Associated with Dance Events in Arizona

Type of Spending	Per Person Daily Spending	Estimated Total Visitor Spending	Visitor Economic Contribution		
			FTE Jobs	Labor Income	Output
Lodging	\$42	\$233,000	4	\$139,520	\$423,853
Food	\$28	\$265,692	5	\$155,748	\$521,772
Retail	\$16	\$151,824	4	\$114,820	\$319,032
Transportation	\$15	\$142,335	3	\$100,660	\$296,560
Total	\$101	\$792,851	16	\$510,749	\$1,561,217

Source: Arizona Office of Tourism, Longwoods International, Travel USA Visitor Profile 2021.

Summary of Economic Contributions

Figure 10 is a summary of the annual economic contributions of the dance industry in Arizona, which totaled an estimated \$38.3 million in 2019. The portion of the dance industry represented in this analysis includes 966 direct full and part time employees and sole proprietors with annual labor income of \$8.3 million and gross revenues of \$18.5 million per year in 2019.

These individuals, organizations and other dance businesses purchase a variety of goods and services in Arizona that create indirect economic contributions. These local purchases supported an estimated 60 jobs, \$2.5 million in payroll and \$9.1 million in output in 2019.



Ballet Arizona, Downtown Phoenix Journal.

The individuals employed in the dance industry make additional expenditures from local retail and service businesses. In addition, the numerous festivals, competitions and workshops hosted annually in Arizona bring a large number of visitors to the state who spend money on lodging, food, retail and local transportation during their stay. These induced economic contributions are estimated at \$10.8 million, supporting 74 jobs and \$3.4 million in labor income. The combination of direct, indirect and induced economic activity related to the dance industry in Arizona in 2019 is estimated at \$38.3 million, supporting 1,100 jobs and \$14.2 million in annual labor income throughout the state. These businesses and organizations in the dance industry enrich the cultural arts and quality of life in Arizona, and also make important contributions to the state's economy.

Figure 10
Summary of Total Economic Contribution
of the Dance Industry to Arizona in 2019

	Jobs	Labor Income	Output
Direct Contribution	966	\$8,315,769	\$18,453,081
Indirect Contribution			
Local Purchases	52	\$2,252,928	\$7,983,198
Event and Venue Revenues	8	\$244,126	\$1,135,869
Induced Contribution			
Employee Spending	58	\$2,899,569	\$9,207,484
Visitor Spending	16	\$510,749	\$1,561,217
Total Annual Economic Contribution	1,100	\$14,223,142	\$38,340,849

Applied Economics Background

Applied Economics LLC is an economic consulting firm based in Phoenix, Arizona, specializing in economic development, economic and fiscal impact assessment, socioeconomic modeling, urban planning and custom software applications. Our clients include local governments--cities, counties, councils of government and school districts; as well as utilities, regional economic development organizations, retailers and retail developers, and various large corporations. We are experienced at working with various levels of public and private sector staff as well as steering committees and community groups representing diverse perspectives. We strive to provide the necessary technical information, in an unbiased and understandable format, in order to allow decision-makers to make better, more informed choices.

The principals at Applied Economics have worked together for more than 25 years, and are very experienced in working with local and regional planning and development issues. Applied Economics was formed in 1995, in order to specialize in the more technical aspects of economic research. We continue to provide our clients with a personalized and responsive approach to problem solving, based on utilizing information technology to bring to bear relevant data for informed solutions.